Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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BY TIMOTHY HOLMES, M.A., F.R.C.S. ENG.,
PROFESSOR OF SURGERY AND PATHOLOGY TO THE COLLEGE.

LECTURE III.
VERTEBRAL ANEURISM.

MR. PRESIDENT AND GENTLEMEN, — The occurrence of spontaneous aneurism of the vertebral artery in the neck has not as yet been noticed, so far as I am aware; but traumatic aneurisms of this artery are not so very infrequent, and we possess already records of eleven cases in which the carotid artery has been tied—in four for wound and in seven for traumatic aneurism of the vertebral.

It is therefore worth while, in discussing the practical surgery of cervical aneurism, to see what were the leading features of these cases, and how such an error could in future be avoided. For there can be no question that the ligature of the carotid in a case of vertebral aneurism must be fraught with double mischief. In the first place, by throwing the strain of the anastomosing circulation on the vertebral, it tends to aggravate the disease it was meant to cure; and in the second, if the circulation in the wounded vertebral artery is interrupted before the operation (which to some extent it almost certainly must be), the stoppage of the supply from the carotid artery is rendered doubly perilous to the nutrition of the brain. The cases are as follows:—

Table of Cases of Wounds and of Traumatic Aneurisms of the Vertebral Artery, in which the Carotid has been tied by mistake.

SURGEON.	AUTHOR.	Compression tried or no.	Death at what period.—Post-mortem appearances.
I. WOUNDS.			
1. 1833: J. Watson ...	J. R. Wood: *New York Journal*, July, 1857	... ...	Died third day. Cerebral softening; pleurisy with suppuration, existing probably before operation; the left vertebral cut almost across.
2. 1848: Ossieur de Roulers	Chassaignac: Traité des Opérations, i., 336	Compression on the carotid stopped the bleeding	Died of hæmorrhage, third day. The vertebral found wounded; at what point is not stated.
3. 1862: A. Pritchard, of Bristol	*Brit. Med. Journ.*, vol. i. 1863, p. 399	Not tried ...	Died of repeated hæmorrhage three days after the injury, and twenty after the ligature. The vertebral was cut across as it entered the foramen magnum.
4. Voisin	Eve's Collection of Remarkable Cases in Surgery, p. 641; Pilz. Laug. Archiv., ix., 290	... ...	I have not been able to refer to the original. No post-mortem examination was made, and it seems doubtful what the wounded artery really was.
II. TRAUMATIC ANEURISMS			
1. 1829: Chiari	Filiatre Sebezio, ann. 3, fasc. 2; Chassaignac, op. cit., p. 334	No	Death nine days after operation from pyæmia. Aneurism situated on the vertebral artery between the first two vertebræ.
2. 1834: Romaglia... ...	Ibid., and Froriep' Notizen, vol. xli., p. 89	Compression on the carotid seemed to diminish the pulsations	The artery was exposed, and a ligature put round, it, but not tightened. Died from hæmorrhage. The aneurism was seated on the first curve of the vertebral artery, which in this case lay between the second and third vertebræ, instead of between the first and second.
3. 1836: Cattolica	*Gaz. Méd.*, 1836, p. 435.		
4. 1840: Kluyskens ...	Chassaignac, op. cit., p. 239	Compress. stopped the pulsation, but the lig. did not	Death four months afterwards from hæmorrhage after the bursting of the aneurism. No post-mortem examination.
5. 1847: Northern Hospital, Liverpool	South's Chelius, ii., 250	No	Died fourteen days after operation from rupture of aneurism, which lay between the transverse processes of the fourth and fifth cervical vertebræ.
6. 1863? At S. José Hospital, Lisbon	*Brit. Med. Journ.*, vol. i. 1863, p. 197	No	Death on twentieth day after ligature. Cause not given. Aneurism situated between the second and third vertebræ.
7. 1865: Lücke	Laug. Archiv., vol. viii., p. 78	Compression on the carotid diminished but did not quite stop the pulsation.	As the symptoms persisted after the ligature of the carotid, the aneurism was injected with perchloride of iron. It burst, and was laid open; and the bleeding vessel commanded by pressure. He died more from the consequences of the ligature of the carotid than anything else. Vertebral wounded between atlas and occipital bone.

Of these cases, the one which is most fully reported, and which best illustrates the diagnosis and treatment of vertebral aneurism, is that recorded by Lücke in the eighth volume of Langenbeck's *Archiv*, in which a traumatic aneurism formed at the nape of the neck after a stab. As compression on the carotid checked the aneurismal pulsation, the common carotid was tied. This produced no effect. Repeated injection of perchloride of iron into the tumour produced suppuration and the rupture of the sac. The latter was then laid open, and the open mouth of the vertebral artery was plugged near the foramen magnum. All went on well as far as the aneurism was concerned. There was no more bleeding, but the patient died from hemiplegia and softening of the brain, the result apparently of the operation on the carotid.

In commenting on this interesting case, Lücke remarks on the error into which he was led by the fact that compression on the carotid checked the aneurismal pulsation. He explains this by supposing that the compression of the carotid artery acted simultaneously on the vertebral, and

points out that this may easily happen if the vertebral (as is occasionally the case) enters a foramen in a higher vertebra than usual. It is a little singular that he seems to have omitted to ascertain whether this was so in his patient when he had the opportunity at the post-mortem examination. But other writers have noticed the possibility of checking the pulsation of vertebral aneurism by pressure applied in the same way as for aneurism of the carotid, even in the normal relations of the vertebral.

On the subject of digital compression of the vertebral artery Chassaignac speaks as follows:*—"As the vertebral near its origin lies immediately behind the common carotid, between it and the spinal column, the simultaneous closure of both arteries is inevitable [i. e., when pressure is made on the carotid low down], and it is an error to think that very powerful compression is required for this purpose. In order to convince oneself of this it is only necessary to repeat the following experiment on the dead subject.† After having removed the skull-cap and the contents of the cranium, taking care to cut the vertebral arteries below their junction in the basilar, tie the axillary arteries and the upper part of the abdominal aorta, then inject water through the arch of the aorta. The liquid will be shot out through the two internal carotids and the two vertebrals at the base of the skull. But as soon as even light pressure with the fingers is put on the course of the common carotid in the space extending between two and three inches above the clavicle, between the trachea and the internal border of the sterno-mastoid, the jet will no longer flow from either the internal carotid or vertebral on the side compressed, but will recommence as soon as the compression is removed. If both sides are compressed at once all the arteries cease to spirt. If pressure is made with the same force on the common carotid above the 'carotid tubercle' (i. e., the anterior tubercle of the transverse process of the sixth cervical vertebra), the space below that tubercle being left free, the jet from the vertebral artery will continue, while that from the internal carotid wholly ceases." He proceeds to show that the tubercle in question is much higher than is generally supposed, being always from two to three inches above the upper border of the clavicle. The bearing of this fact on the diagnosis between carotid and vertebral aneurism is obvious. In a case like Lücke's or Kluyskeus', the surgeon, knowing now the true position of the tubercle on the transverse process of the sixth cervical vertebra, and knowing that pressure applied along the course of the carotid anywhere below this—i. e., for two inches at least above the clavicle—will most probably stop the pulsation in the vertebral also, will not conclude that the aneurism affects one of the carotids, or some branch of the external carotid, until he has seen that pressure also stops the pulsation when applied at a higher level, or when applied to the carotid in such a way as to isolate it from other structures, as M. Rouge did. A traumatic aneurism whose pulsations are unaffected by compression so applied must be regarded and treated as vertebral.

There are several cases which are classed by surgical authors as "vertebral aneurisms," in which the fact has not been absolutely ascertained by post-mortem examination, but where the progress of the case left no doubt as to its nature. This was so in Kluyskeus' case, reported by Chassaignac‡ from the Annals of the Medical Society of Ghent. A man had been stabbed an inch below the mastoid process. The wound healed, and a traumatic aneurism formed, which grew rapidly to the size of the fist. All symptoms ceased at once on compressing the carotid, but at what level was not noted. The result of this compression, however, left no doubt on the minds of the surgeons that the aneurism affected some artery of the carotid system, and, accordingly, the trunk of the common carotid was exposed and tied. The operator did not notice whether compression on the denuded artery would stop the pulsation; at least, there is no note to that effect. But he noticed with great surprise, after tying the ligature, that it produced no effect on the tumour. The man recovered from the operation, but the pulsation of the tumour continued as before, except that it diminished in force during a severe attack of dysentery which occurred to him in the hospital, and much reduced his strength. Finally, after he had left the hospital, and his general health had improved, the aneurism burst, and he died of the hæmorrhage some four months after the wound.

In this case there was no post-mortem examination, but the symptoms are identical with some in which the vertebral has been found to be the artery injured, such as the following, which is also quoted by Chassaignac* (Chiari's case).

A man had been stabbed beneath the left parotid; the wound healed, but a traumatic aneurism formed, and grew to the size of an egg in about two months. It was taken for an aneurism of one of the posterior branches of the external carotid, and the common trunk was tied. The pulsation continued. The patient died from the operation, the cause of death being apparently pyæmia. The autopsy proved that the tumour was situated on the vertebral artery, at the precise point where it makes its curve between the first two vertebræ.

Cattolica, of Naples, has related in an Italian journal (translated in the *Gazette Médicale*, 1836, page 425) two cases of aneurism of the vertebral artery—one treated by ligature of the carotid, and proving fatal by rupture of the aneurism. The precise level at which the artery was wounded is not stated, but it was high up in the neck. Compression of the carotid had not been tried. In the second case the wound was immediately below the angle of the jaw. The ligature of the carotid was commenced, but when the artery was exposed it was found that pinching it between the fingers did not stop the pulsation of the tumour. The operation was abandoned. Compression and styptics were applied to the tumour, but the skin covering it was sloughing, and it would soon have burst, when the patient died of gastric fever.

In commenting on these cases the French writer points out the propriety of commencing the treatment by direct compression, which having failed, he recommends the plan ultimately adopted by Lücke—viz., to lay the tumour open and command the bleeding mouth by compression with charpie steeped in some astringent.

After the relation of his case Lücke also comments at considerable length on the treatment which should be pursued in similar circumstances, allowing that the diagnosis of vertebral aneurism has been established. The ligature of the vertebral artery at the root of the neck is a difficult and formidable operation, nor is there any probability that it would check the circulation through the upper portion of the vessel so near its inosculation with its fellow. He argues therefore, I think, conclusively against any such attempt, and still more is the attempt to tie the subclavian above the origin of the vertebræ to be reprobated. Yet I cannot say that the course which he followed—viz., the repeated injection of perchloride of iron—seems at all to be recommended. In order that this mode of cure should have any fair chance of success, it appears to me necessary that the surgeon should be able to command the affected artery both above and below the tumour. And if the injection does not succeed, or at any rate produce some marked effect, at the first or second sitting, I doubt whether it should be persevered in. To practise repeated injections into a tumour like this will almost certainly cause suppuration and rupture of the sac, as it did in this instance.

The only case of recovery after vertebral aneurism which I have found is reported by Möbus in the fourteenth volume of Graefe and Walther's Journal. It bears much resemblance to Lücke's case, being the result of a stab just below the ear. The tumour was expected every day for some time to burst. The surgeon, believing that some branch of the external carotid was wounded, exposed that artery in order to tie it, but found that pressure on the denuded artery had no effect on the pulsation, so abandoned the operation, and urged the laying open of the tumour. The patient would not consent, and ultimately the tumour ceased to beat and disappeared. No treatment was adopted except the application of cold. The cessation of pulsation was preceded by very severe pain.

* Chassaignac, Des Opérations Chirurgicales, vol. i., p. 340.

† This experiment was devised by M. Fraeys, of Ghent, who reported the case operated on by M. Kluyskeus, related below. Mr. Haward, Curator of the Museum of St. George's Hospital, has been kind enough to repeat it for me. Any dissection of the neck will show the relative position of the vertebral and common carotid, and how pressure applied to the root of the carotid, near the clavicle, must act also on the vertebral, which lies just underneath it.

‡ Op cit., p. 339.

* From the Filiatre Sebezio, ann. 3, fasc. 2.

Bearing this case in mind, I think we should hesitate before proceeding to any extreme measures in a case of traumatic aneurism of the vertebral artery. I do not see what operation can be practised on such a tumour with any hope of success, except that modification of the method of Antyllus proposed by Mr. Syme—viz., to make a small opening in the sac, through which the finger is introduced, plugging the hole and preventing hæmorrhage, while the surgeon feels for the point at which the blood-stream enters the sac, and where the pressure of his finger checks the pulsation. Having this under command, the sac may be freely laid open, so as to expose the mouth of the vessel, and a ligature may possibly be cast upon it. Even if the vessel is divided too near the bone to be tied, it may be possible to plug it, as Lücke did. The account of his case and of its post-mortem examination points very strongly to the conclusion that his patient might have recovered but for the ligature of the carotid, even in spite of the damage done by the injection of the perchloride of iron; while abstinence from all active treatment might very possibly have led to the same fortunate result as in Möbus's patient.

The effect of compression applied over the lower part of the carotid ought to be carefully noted in any case of supposed vertebral aneurism; and if this stops or greatly reduces the pulsation of the tumour, I see no reason why it should not produce a cure if the patient can tolerate it.

The conclusions, then, to which present experience points on the subject of vertebral aneurism may be thus summed up:—

1. A traumatic aneurism may be taken to be vertebral when it is situated in the course of that vessel, and when its pulsations are not commanded by compression of the lower part of the common carotid.

2. When a traumatic aneurism is situated as above, and its pulsations are commanded, however completely, by pressure on the common carotid low in the neck, it ought not to be treated as being carotid, or as affecting a branch of the carotid, unless it is clearly proved that its pulsations are stopped by pressure applied above the level at which the vertebral ceases to be compressible—i.e., above Chassaignac's "carotid tubercle."

3. An aneurism diagnosed as vertebral may be treated by compression (gradual or rapid, as the case demands) of the root of the vertebral artery in the neck, if this is found feasible.

4. If indirect compression will not stop the pulsation, or if it cannot be borne, the tumour should be subjected to direct compression and refrigeration, to which internal remedies may be added; and possibly the subcutaneous injection of ergotine may be of use.

5. If these means fail, and the tumour appears likely to burst, or if it has burst, the sac should be opened with all due precaution, and an attempt made to tie or plug the wounded artery.

6. A wound known or suspected to be of the vertebral artery should be treated either by direct pressure or by ligature of the vessel in the wound.

INTRACRANIAL ANEURISM.

In order to complete the subject of aneurisms of the head and neck, it remains to speak of intracranial aneurism and aneurism of the internal carotid or its branches in the orbit or cavernous sinus.

With regard to intracranial aneurism, I need only mention it very cursorily in a course of lectures devoted to the surgical treatment of the disease. We know nothing at present of the diagnosis of intracranial aneurism, so that no treatment can as yet be directed especially to it. And, looking at the very free intercommunication of the four large trunks which nourish the brain, it seems unlikely that surgical measures directed to any one of them would procure the consolidation of an aneurism situated on one of its main branches. Nor would the consolidation of an aneurism render the patient by any means secure from cerebral symptoms. A case is recorded by Professor R. W. Smith, of Dublin,* of aneurism of the posterior cerebral artery, which proved fatal by pressure on the brain, though it had been completely consolidated.

Yet the question occurs whether the trial may not be worth making, even allowing the prospect of success to be but small, if only the diagnosis could be established. Let me refer to two cases—one the well-known case operated on by Mr. Coe of Bristol, the other a case related by Professor R. W. Smith in the tract above referred to.

Mr. Coe's case is well known, and an abstract of it is given by me in the System of Surgery (2nd edit., vol. iii., p. 584). There were symptoms of pressure on the nerves of the cavernous sinus, accompanied by a loud bruit over the whole side of the head and much cerebral distress, following a blow. All symptoms subsided on the ligature of the carotid, and the patient remains well up to the present time, more than twenty years afterwards.

The analogy of the symptoms in this case to some of those which I shall have to refer to afterwards of orbital aneurism is striking, except that there was no dilatation of the orbital veins, and consequently no exophthalmos or pulsation in the eyeball. But those symptoms do not come on till some time after the injury;* and I own that I look on this case as one in which some injury was done to the vessels in the cavernous sinus by the blow, which might have produced fracture of the base of the skull. Whether that injury resulted in the formation of an arterial or arterio-venous aneurism, or of thrombosis of the sinus, causing bruit while the artery pulsated, we can never know in the absence of post-mortem examination.

What I wish to draw attention to in this case is the presence of serious symptoms, not precisely cerebral, but affecting the nerves at the base of the brain, deriving a conjectural explanation from auscultation, which was, at any rate, so far supported by the result that the operation undertaken on the faith of that diagnosis restored the patient to health. We must admit that in Mr. Coe's case the diagnosis of aneurism remains conjectural. If there was an aneurism it was very probably within the cavernous sinus, and not truly "intracranial," as I would limit that term, meaning thereby not (according to its literal sense) "within the skull-cap," but "within the membranes of the brain." The case, however, shows the great importance of auscultation in suspected aneurism within the skull, and it is valuable in another respect, inasmuch as the symptoms were not so urgent as not to allow the surgeon time to form his diagnosis. In most cases of intracranial aneurism the disease is first revealed by a fit of apoplexy; and, as I hinted before, even if the disease could then be diagnosed, and if surgical treatment could procure the consolidation of the aneurism, it is far from certain that the patient's life would be saved.

But the following case, related by Professor R. W. Smith, shows us that true intracranial aneurism may sometimes pursue a chronic course, and that there is reasonable hope that in such cases the arrest of its course would save the patient's life, even if it failed to restore his health. The patient was a coalheaver of very drunken habits, aged thirty-three. He had been drunk more or less for three days before admission, though working hard most of the time; had slept out all night, exposed to the weather; then, on attempting to rise, had staggered and fallen, and was brought to the hospital insensible. There was no distinct history of injury. His symptoms were apoplectic, with retention of urine and inability to swallow; but he soon recovered from this state, and was able to leave the hospital in a short time. He was then listless and stupid, and his memory was nearly gone; but the only positively paralytic symptom was partial ptosis of the right eyelid, divergent strabismus, and considerable loss of vision of that eye, large objects being perceived only imperfectly, and small ones not at all. The functions of the fifth and seventh nerves were unimpaired. In this condition he remained an inmate of one of the workhouse wards for four years, and he then died very suddenly in an apoplectic fit, which terminated his life in a quarter of an hour. The lesion was found to be an aneurism, "the size of a small plum," situated at that part of the circle of Willis where the carotid artery terminates, and the fatal seizure was due to its rupture. The sac was almost completely filled with laminated coagula of great density, some of them of a buff colour and leathery consistence.

The case, it is said, had been long under observation, and had attracted much interest. The lesion was obviously seated in the neighbourhood of the third and optic nerves,

* Dublin Quarterly Journal, Nov. 1870.

* In some cases, according to Demarquay, even years have intervened between the commencement of the symptoms and the protrusion of the eye. (Demarquay: "Des Tumeurs de l'Orbite," p. 322.)

but the existence of aneurism had not been suspected. This is much to be regretted, since it would have been most important to have recorded the result of auscultation in this case. Had there been, as in Mr. Coe's case, a bruit audible over the side of the head, it might have led to the effects of pressure on the carotid being noted, and thus to an attempt to cure the disease, the result of which could hardly have failed to be most instructive whether successful or no. I am by no means sure that in such a tumour a bruit would be heard, unless audible by the patient; but up to the present time, as far as I know, we have no information on the point.

We see, then, that although there is some possibility that a few cases of intracranial aneurism may become subjects of surgical treatment, our information on the subject is at present very limited, and surgical treatment is almost untried.

(To be concluded.)

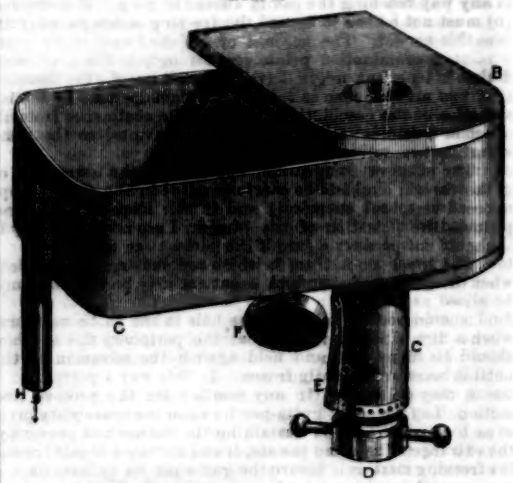
A NEW FREEZING MICROTOME.

BY WILLIAM RUTHERFORD, M.D.,
PROFESSOR OF PHYSIOLOGY, KING'S COLLEGE, LONDON.

ALL microscopists have experienced the difficulty which attends the cutting of soft tissues into thin slices. Valentin's knife is continually had recourse to for this purpose; but although by means of it excellent sections may be made of an organ having a density such as that of the kidney, it is by no means so successful in the case of mucous membrane, lung, or even in that of the skin; and for the brain, spinal cord, and the delicate tissues of the eye, spleen, thyroid and lymphatic glands it is useless. Such tissues require to be hardened ere they can be successfully sliced. They are usually hardened by means of chromic acid, potassium bichromate, Müller's fluid, alcohol, &c. In general the hardening process requires considerable time, varying from several days to several weeks; and, after all, the tissues undergo alterations which, although advantageous in the case of some, are not so in the case of others. The vitreous humour is quite destroyed, lymph spaces are very often obliterated, soft tissues are sometimes shrivelled. The method of hardening the tissues by freezing has long been recognised as one of great importance in enabling the histologist to obtain sections of fresh tissues, but it has hitherto been little adopted owing to the inconvenience and clumsiness of the methods proposed.

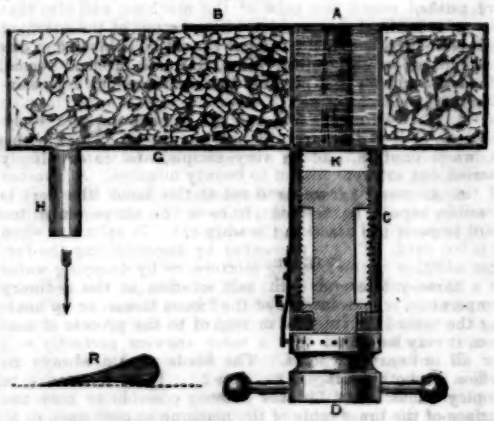
In May, 1871, I published in the *Journal of Anatomy and Physiology* an account of a microtome invented by me for the purpose of facilitating the process of freezing and of cutting frozen tissues. The apparatus there described and figured, although capable of doing much, is not quite so perfect as the following modification adopted by me some months ago. This new apparatus answers the purpose so satisfactorily that it is now full time for me to publicly direct attention to it. The apparatus consists (Fig. 1) of a brass plate (B) with a hole in its centre (A). This hole leads into the interior of a vertical tube (E) with a movable bottom (K, Fig. 2), which may be raised or depressed by means of a screw (D). The tissue to be frozen and cut is placed in the tube (A). The section is made by means of a knife, which is glided horizontally through the tissue that projects above the level of the brass plate (B). The thickness of the section is regulated by an indicator (E). The machine is fixed to a table by means of a screw (F), and it may be employed for two objects—1st, for cutting tissues hardened in the ordinary way by chromic acid, &c.; and, 2nd, for cutting tissues hardened by freezing. The second method of using the machine will be more readily comprehended after a description of the first, which is simply this: Place a portion of hardened tissue, say a piece of spinal cord hardened by chromic acid, in the hole (A), and pour around it a mixture of paraffin (five parts) and hog's lard (one part) melted by the aid of a gentle heat. Or the paraffin mixture may be first poured into the hole, and the piece of tissue thereafter introduced and held in any desired position by means of forceps until the paraffin becomes sufficiently hard. In order that the paraffin may fairly support the tissue it is necessary that the surface of the latter be dry. This is easily accomplished by leaving it exposed to the air for some time, either with or without previous immersion in spirit. A mixture of equal parts of beeswax and olive oil is much recommended for the same purpose as the paraffin in the above case. No doubt the wax and oil mixture is most excellent for imbedding tissues, and it can be cut with the greatest ease. But it melts at a higher temperature than paraffin, and, owing to the great thermal expansion, it retracts from the side of the tube of the machine, and so the wax cylinder becomes loose. The only way in

FIG. 1.



Rutherford's Microtome. — A, A hole in the brass plate (B). C, Tube. D, Screw. E, Indicator. F, Screw for fixing the machine to a table. G, Box for holding a freezing mixture. H, Tube for permitting the water to flow from the melting ice.

FIG. 2.



Vertical section of the Microtome. — The hole (A) is shown containing a piece of tissue, and the freezing-box containing a freezing mixture. K, a movable bottom to the hole (A). R, Transverse section of the knife employed in making the sections. Other letters as in Fig. 1.

which this can be prevented is by heating the machine to a like temperature before putting the wax into it. This is tedious; and inasmuch as it is unnecessary in the case of paraffin, this is to be preferred. Even with this, however, the paraffin cylinder is apt to become a little loose and to turn round in the machine: hence it is important that there be an eccentric hole in the brass plug (K, Fig. 2), so that the paraffin may pass into the hole, and thereby be prevented from rotating. When the machine is used for the *second* object—that is, for freezing—

the following directions are be attended to:—Surround the freezing box with two or three layers of flannel, and screw the machine to a table. Unscrew the movable bottom or plug (K, Fig. 2), and pour methylated spirit into the tube (C); oil the side of the plug; replace it; screw it down to any desirable extent, and there leave it. The object of this is to prevent the screw from becoming fixed by the freezing. The spirit which has come up above the plug (K) must be thoroughly removed by means of a towel, and a small slit at the margin of the plug carefully closed by means of hog's lard, which should also be spread in a thin layer around the entire margin of the plug to prevent the spirit from in any way reaching the cavity above the plug. The screw (D) must not be touched until the freezing is completed, in case this accident occur. The tissue to be frozen, together with an embedding fluid, are placed in the hole. If we desire to be very careful of the protoplasts of the tissue, this fluid must be a so-called "neutral" fluid, such as blood-serum, albumen, or a three-quarter per cent. solution of common salt. It is, however, difficult to cut these fluids when frozen, owing to their becoming crystalline. For ordinary purposes it is preferable to employ a solution of gum arabic. This solution is made in the following manner:—Add to ten ounces of water two drachms of camphorated spirit and five ounces of picked gum arabic; when the gum has dissolved, strain the fluid through calico or tow, and preserve for use in a corked bottle. The gum, when frozen, can be cut with great facility; indeed, it can be sliced as easily as a piece of cheese. The gum or other fluid should be first placed in the hole in the machine, and when a film of ice has formed at the periphery the tissue should be introduced and held against the advancing ice until it becomes partially frozen. In this way a portion of tissue may be secured in any position for the process of section. Lay a piece of gutta-percha upon the brass plate (B) so as to cover the cavity containing the tissues and prevent the entrance of heat and the accidental entrance of salt from the freezing mixture. Secure the gutta-percha by inverting, say, a small tumbler or beaker upon it, and place a weight thereon. Surround the box from side to side by two or three layers of flannel. These can be readily fixed by pushing them between the machine and the table to which it is fixed. Place in the freezing box (G) alternate quantities of finely powdered ice and of salt, and take care that they are pushed round the tube of the machine, and also that the tube (H) is kept open in order to permit of the constant egress of the water from the melting ice. The freezing can be most rapidly effected by the addition, at short intervals, of small quantities of ice and salt, and by repeatedly stirring the mixture in order that the escape of water may be facilitated. This is to be preferred to covering the whole machine up in a bag of the freezing mixture. This process is, when practised, really very simple, and can be fully carried out in from fifteen to twenty minutes. A number of tissues may be frozen and cut at the same time. It is possible, especially in winter, to have the tissue frozen too hard to permit of its being readily cut. It splinters when it is too hard. This is prevented by discontinuing the further addition of the freezing mixture, or by dropping water or a three-quarter per cent. salt solution at the ordinary temperature on the surface of the frozen tissue, or by heating the razor slightly. With regard to the process of section, it may be stated that a razor answers perfectly well for all ordinary purposes. The blade should always be *hollow* on both surfaces. (R, Fig. 2.) It is a mistake to employ a flat knife, for it is scarcely possible to keep the surface of the brass table of the machine smooth enough to permit of the knife lying quite flat. The knife should be *pushed* obliquely through the tissue, which should be cut at one sweep. This is not possible with a frozen tissue if the ice be too hard. For an unfrozen tissue embedded in the paraffin the knife should be wetted with methylated spirit. This is dropped upon the knife from a funnel with an elastic tube depending from it, clamped by a Mohr's clip. The funnel is suspended at a convenient height above the machine. The spirit keeps the blade perfectly clean, and it forms a pool upon it which enables the section to float over the surface with ease. In the case of freezing it is not necessary to wet the knife, for the melting ice readily does so.

Mr. McCarthy has modified my original machine by causing the ice box to project at the right as well as at the left side of the brass table (or the knife). I cannot at all approve of this modification, because it interferes very seriously with the movements of the right hand in the process of section. I have studiously avoided such an arrangement from the very first. The points in which my new differs from my old machine are these. The table for the knife (B) and the freezing box are larger. The escape tube (H) is larger, and the indicator is constructed upon a bette principle. I advise those who may have obtained my old machine from Hawksley to get the freezing box made twice as large, and they will find it a very serviceable instrument, although, owing to the coarseness of the screw, necessitated by the nature of the indicator, that machine cannot give such reliable results as that here described. The pathologist, the physiologist, the zoologist, and the botanist will find this machine of the greatest service. It supplies a desideratum long needed. But I must refer them to my forthcoming work on "Practical Histology" for the special indication of the cases in which it is most applicable. In conclusion, I would express my gratification that so skilled a microscopist as Mr. Needham has publicly testified (*Monthly Microscopical Journal*, June, 1873) to the advantages which my method of freezing tissues for the purposes of microscopy possesses over all others that have been hitherto proposed.

The new microtome is made by Baker, of High Holborn.

ON A CASE OF

SYNCOPE FOLLOWING CHLOROFORM.

BY HENRY SMITH,

SURGEON TO KING'S COLLEGE HOSPITAL.

MY friend Mr. Gage Brown, of Sloane-street, sent me a gentleman, aged thirty-five, who had resided in India for some time, and who had become quite blanched through bleeding from the rectum. I found that this loss of blood resulted from two internal hæmorrhoidal tumours, which I resolved to remove. The patient was in a very weak state; but it was not considered desirable that he should submit to any further loss of blood, and a few days after I proceeded to operate with the clamp and cautery. A most careful and experienced chloroformist administered the agent by means of lint—in my private practice I will not permit the employment of any other method if I can help it,—he, at my special request, being doubly careful in watching the chloroform, as the patient was so feeble. The operation was proceeded with and completed in a few minutes without any loss of blood; and the patient so far recovered from unconsciousness as to commence talking and laughing somewhat loudly, but I did not notice if he raised his head from the pillow. The talking ceased, and suddenly we found the man apparently dead, without pulse or breathing. We rapidly set to work to restore animation by the usual methods—violently slapping the chest and face, and for a moment it appeared with success, a slight movement of the chest following; but, vigorously as we pursued these methods, the deathly pallor increased if possible, and we all felt convinced the man was dead. We then practised Silvester's method, but without avail until the finger was thrust down the throat on to the top of the glottis. This excited a slight quiver. Our energies were redoubled, and slowly we had the inexpressible pleasure of seeing our patient emerge from the most dangerous position I have ever seen a human being get out of.

I think it right to note this case, of which I have never seen the like before. I have had in my own practice four cases where the most imminent danger arose from the exhibition of chloroform, and I have seen three or four others where the recovery was marvellous; but this was the first case I have ever seen where the effects of chloroform had gone off, the patient had become sensible, and then sudden and most dangerous syncope had occurred. I suppose there can be little doubt that in this instance the patient, who had scarcely any real blood in his system, had become exhausted by the half-involuntary efforts of talking and laughing after he had partially recovered from the effects of chloroform; and, had he died, I do not think that we could with truth have laid the account to the chloroform

itself. The case teaches us, especially where there has been great loss of blood, to try and prevent anything like the excitement of talking, laughing, or any movement on the part of a patient until a thorough consciousness and recovery has taken place.

I was mentioning this case to my friend Dr. Squarey, and he called to my recollection an instance where he administered chloroform for me, and where a dangerous syncope came on during the operation and alarmed us much. It appears that in this case I was very late with my appointment, and the patient had been walking up and down the room for an hour previously in a state of great mental excitement. In both of these cases the conditions which led to the alarming syncope could be prevented; and, from what I have myself observed, I cannot help thinking that in most instances the deaths from chloroform may equally be prevented by due preparation and care in connexion with its administration, and it is especially important to exercise this caution now that efforts are being made to create alarm both with the profession and the public in respect to chloroform as an anæsthetic.

Wimpole-street.

ANIMAL VACCINATION.

By HENRY BLANC, M.D., F.R.G.S.,
SURGEON H.M. INDIAN ARMY.

SOME three years ago I was allowed the privilege of laying before the numerous readers of THE LANCET the results of my experiments on the vaccination of heifers with spontaneous cow-pox. I venture again to claim the impartial hospitality of THE LANCET to record what experience has since then taught us, and with this view I will simply narrate what has taken place in India, and leave it to the medical public to judge for themselves. I have no intention nor desire to open again a discussion on the grounds which, according to my views, made animal vaccination a necessity in a land where vaccination is compulsory. I will only notice that one of the points on which I claimed the acceptance of this mode of vaccination—namely, the possibility of the transmission of disease through humanised vaccine lymph—has since that date been decided in my favour. The facts laid before the Royal Medical and Chirurgical Society have proved that, in England also, syphilis can be transmitted by arm-to-arm vaccination, and although an exceptional occurrence, it can but speak in favour of a system free from this very serious objection.

In October, 1869, I returned to my duty in India. From the last heifer I had inoculated in London (September, 1869) I charged some tubes and some large ivory points. Both tubes and points were packed in a small wooden box, and the box itself wrapped up in several layers of cotton and placed in the centre of a large trunk. In December, 1869, assisted by Dr. Pinkerton, the able Superintendent-General of Vaccination, Bombay Presidency, and by Dr. Anunta Chaudroba, the local Superintendent of Vaccination, Bombay, I inoculated carefully a heifer from the points and tubes I had brought with me. All the inoculations made with the lymph in tubes failed; fortunately almost all the points gave a successful result. From this heifer I inoculated a second one, and, finding the result highly successful, I made over the work to Dr. Anunta Chaudroba, as my official duties called me elsewhere.

I must say, that in Bombay no man could have succeeded so well as Dr. Anunta. He is a well-educated native gentleman, and by birth a high caste Brahmin; this position gave him a considerable influence over his countrymen, and any objections that might possibly have been raised by the natives against this use of their sacred cow were at once silenced when the sanction to this practice was publicly given by one of the most esteemed of the leaven of the Hindoo community.

The following extracts are taken from Dr. Anunta Chaudroba's report for the year 1871–72. It is the latest issued. Some delay must have taken place in its publication, as the Government resolution on the Vaccination Report for 1871–72 is dated the 17th January, 1873.

Dr. Anunta Chaudroba says:—"At the commencement of the past year an epidemic of small-pox was raging with some severity all over the island. Two European officers in high position died from the virulence of the poison. This circumstance frightened the European community into getting themselves revaccinated. Very many from amongst them were accordingly operated upon, for the most part successfully. The *employés* of the dockyard, the officers and crews of the *Magpie*, *Tamná*, *Dalhousie*, and others, were also revaccinated. Altogether the number of revaccinations amounted during the year to 3543, of which 1510, or a percentage of 50·16, were successful, 1500 failures, and in 533 the results could not be ascertained. In the instance of the *Magpie*, the officers and crew were operated upon in two batches. The first batch consisted of 51 persons; of these some 42 took the disease, and in many of them the vesicles were almost as good as of primary operations. Before the result of the second batch could be ascertained the vessel sailed away to its destination, the Persian Gulf.

"The lymph in use throughout the year was of the best quality. Animal vaccination does not only give us an abundant supply of excellent lymph, but has made us quite independent of any assistance from the mofussil, which formerly was always indispensably necessary during every hot and monsoon season. Several tubes of English lymph were supplied by the Superintendent-General of Vaccination. With one exception they all proved successful; but as our own lymph was good and genuine enough not to require any replacement, no care was taken about it.

"We have been singularly successful with our animal vaccination during the past year. Some 130 heifers were inoculated, and, with two or three exceptions only, they were all successful. Of the two failures one occurred in a heifer inoculated on Wednesday, the 12th of April, 1871. The heifer was healthy-looking, the skin was pretty clean and clear, and the lymph used to inoculate with was partly fresh and partly preserved in capillary tubes. The other failure occurred in a small heifer inoculated on the 8th day of May, 1871. In this, however, the skin was much irritated and abraded, and, consequently, the lymph, though fresh, could not have any effect. With these two exceptions, all the operations proved successful, not in the animals alone, but their lymph took well in the human subject. The following table shows the number of heifers inoculated in each month, with the result of the operations:—

	1871.								1872.			
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Total
No. of heifers inoculated	16	16	14	8	6	7	6	10	8	8	11	20	130
Operations:													
Successful	15	15	14	8	6	7	6	10	8	8	11	20	128
Unsuccessful	1	1	0	0	0	0	0	0	0	0	0	0	2

"Out of the 12,094 primary operations, 8200, and almost all the revaccinations, were performed with animal lymph. Of the 8200 primary operations, 7324 were successful, giving as a percentage of success 89·3. The amount of success I can consider to be fair for the time that animal vaccination is carried on. I have no doubt, however, that with increasing knowledge of, and acquaintance with, the subject, the results would go on improving. The lymph, however, continues to be as capricious in its effects as before. What appears to be excellent lymph, and derived from a genuine-looking vesicle, often fails. Not that this failure is complete. Out of some 10 or 12 vaccinated, perhaps one or two only take, and then only in one or two places; but the lymph from these vesicles is as effective as could be desired. In other instances, what appears to be indifferent lymph, from dried-looking vesicles, proves successful in every case in which it is used. Why this is so I have not been able to ascertain, nor would I be in a position to do so satisfactorily till I shall have had an opportunity of personally seeing and watching every case operated on with this lymph. Then only can any deductions be drawn, and any systematic rules of practice, based on scientific principles, be framed for future guidance. Compulsory vaccination and inspection alone can assist us in this respect. In the meantime it is enough for the authorities to know that an experience of twenty-eight months has fully convinced me that animal vaccination has done a great amount of good to Bombay

and is capable of doing the same, almost to an unlimited extent, in future, and that it has become a necessity which cannot at all be dispensed with.

"All opposition to the use of animal vaccine lymph, from every quarter, has completely ceased, and all receive it not quietly, but eagerly—a tacit acknowledgment of its superiority. Scarcely a single European child is vaccinated except with animal lymph.

"During the year under report Dr. Warlomont, of Brussels, was kind enough to send me three supplies of animal lymph, of 12 charged points each. I am sorry to say that, unfortunately, none of them proved successful; though all the three supplies that were received from him through Dr. Blanc, in the year preceding the one under report, had proved successful. The comparative smallness and insufficiency of the municipal grant for animal vaccination compelled me to use this lymph in heifers, a part of whom was inoculated at the time with fresh lymph, as it was difficult to spare separate ones for this lymph alone. I do not, however, believe that this circumstance had anything to do with the failure. I have, however, carefully secured some points, and, as soon as the small-pox season is over, mean to use this lymph in a heifer by itself."

From the above extracts we may conclude that, to some extent, animal vaccination is expensive, and may offer some difficulties in its application; but these very trifling drawbacks are largely compensated by its many and great advantages. Applied to large cities, it is an admirable system of vaccination; and I am convinced that, if encouraged in London and supported by Government, as it has been by the Bombay municipality, it would be much appreciated, and remove any prejudice that still exists against the glorious discovery of Jenner.

Rue de la Paix, Paris.

SIX CASES OF NON-IMPACTED COLLES FRACTURE; WITH REMARKS.

BY E. CRESSWELL BABER, M.R.C.S., &c.,
LATE HOUSE-SURGEON TO ST. GEORGE'S HOSPITAL.

I SHOULD not have ventured to add to the already extensive literature on the subject of Colles' fracture but that I hope the following cases may contain some points of interest. They are selected from many cases of this fracture that I have attended at St. George's Hospital during the last twelve months, and my excuse for the scantiness of the notes must be the hurry and want of leisure attendant on the practice of a large hospital.

CASE 1.—Ann R——, aged sixty-nine, was admitted into St. George's Hospital on Oct. 21st, 1872, with an injury to the head and double Colles' fracture, the result of a fall downstairs. Crepitus and preternatural mobility were present in both radii. There was no displacement of the bones at either wrist. In the left wrist much blood was extravasated. An anterior and posterior straight splint was applied to each wrist. The patient, however, died of the head injuries on Oct. 27th. Post-mortem examination showed comminuted fractures of the lower end of both radii.

CASE 2.—Ann S——, aged seventy, applied at the hospital Dec. 13th, having fallen down some stone stairs. There was preternatural mobility and crepitus at the lower end of the right radius; no displacement, but a good deal of swelling. The forearm was put up in two straight splints.

Jan. 11th.—Union is firm; all four movements of wrist easy. To leave off splints.

March 12th.—Movements free; wrist rather swelled, with a prominence of the lower end of the ulna inwards.

CASE 3.—Honora C——, aged forty-two, came to the hospital Feb. 14th, 1873, having fallen down on to her right hand. She had a fracture of the lower end of the right radius, apparently one-half or three-quarters of an inch above the joint. The characteristic curve was very well marked, and crepitus could be easily produced. Was treated with two straight splints, the hand being adducted. In March there was good movement, the wrist being only slightly swelled.

CASE 4.—Ann W——, aged sixty-three, presented herself for treatment on Feb. 17th, also having fallen on to her hand. There was fracture of the right radius about three-quarters of an inch up. The characteristic curve was very slightly marked, and crepitus could be easily produced. Treated with two straight splints.

March 17th.—Union firm; motions free; no displacement; some thickening about the joint.

CASE 5.—Rose R——, aged sixty-three, fell on to her left hand, and applied April 15th with a fracture of the left radius about three-quarters of an inch above the wrist-joint. There was distinct crepitus and mobility, but no distortion. It was treated as the preceding, but no further note was made.

CASE 6.—Elizabeth H——, aged sixty-three, came to the hospital on June 4th, 1873, with the history of having fallen downstairs. She had a fracture of the lower end of the right radius, accompanied with crepitus and well-marked curve. The distortion was easily reduced and put up in two straight splints with the hand adducted.

Remarks.—The following points may be noticed in the above cases.

1. The patients were all women, and, with one exception, over sixty years of age.

2. In all, crepitus was produced without any force being used, showing the absence of impaction.

3. The characteristic displacement was well marked in Cases 3 and 6, very slightly so in Case 4, and was absent in the rest.

Here, then, we have six cases of non-impacted Colles' fracture occurring, five of them in women over sixty, and one at the age of forty-two; of the five, one accompanied by marked, and one by slight, distortion; there being in the younger patient well-marked displacement. There was nothing peculiar about the causes of the injuries. Colles' fracture is well known to be very common in old women (Holmes's System of Surgery, last edition, vol. ii., p. 795), neither is non-impacted fracture of the lower end of the radius of itself an uncommon occurrence. The point, however, to which I wish to draw attention, having regard to the above cases, is the not unfrequent occurrence in women at an advanced age of non-impacted Colles' fracture, frequently without, but sometimes with, displacement of the bones. From the comminution seen after death in Case 1, it may be conjectured that the fracture was of a similar nature to some of the other cases; and how far this would influence the bones, as regards displacement or not, I am unable to say. The notes of the cases are not sufficiently full to justify any conclusion as to the results of the treatment; but, as far as I have seen, the termination is in these cases more favourable, as a rule, than in ordinary impacted Colles' fracture.

P.S.—Throughout this article the term "Colles' fracture" is used simply to designate a fracture of the lower end of the radius, whether this application of the term be strictly correct or not.

APHASIA THE SEQUENCE OF TYPHOID FEVER.

BY J. WARING CURRAN, L.K.Q.C.P., L.R.C.S.I.,
SURGEON TO MANSFIELD WOODHOUSE HOSPITAL, ETC.

IN a recent paper on Aphasia published in THE LANCET the writer states: "Among English authors I have been unable to find any observations on transient aphasia, or on aphasia unaccompanied by paralysis; nor in treatises on fever and on diseases of the nervous system, as far as I have been able to ascertain, is this condition mentioned as one of the results either of enteric fever or any other acute disease." The following is a complete answer, as it is a condensed history of a case of aphasia occurring during the latter stage of enteric fever. The particulars of the case were published by me at the time, but not the result.

A fine intelligent girl contracted, in common with other members of the family, enteric fever. The fever commenced in the ordinary way, but on the seventh day her speech left her entirely. She lay like a statue, taking food and medi-

cine when offered her, *putting out her tongue when requested*, and making intelligible signs when requiring the urinal or to be lifted to the night-chair—a striking contrast to the delirious condition and impatience evinced by those in the same house suffering from the same disease. She then became perfectly unconscious, and remained in that state five entire days. The fever ran its usual course, and on the twenty-first day she had a favourable crisis. I find that I wrote:—"It is now three weeks since crisis; the girl is rapidly recovering her strength; possesses all her faculties—the senses of hearing, feeling, taste, and smell,—but there is no sign of speech returning to her. When she desires to answer in the affirmative, the mouth is widely opened; when in the negative, the lips are compressed. She can smile and is at times sorrowful, *but no human sound at any time escapes her.* She is more mute than the most dumb patient I have ever seen. There is no paralysis, no symptoms of cerebral mischief, no wasting of any of the muscles, nothing unusual to be observed about the throat or tongue. The girl eats well, digests her food properly, and sleeps; there is perfect power in all her limbs."

So the patient continued for twelve weeks, without the least sign of the voice being restored; yet there were no symptoms of localised paralysis nor other cerebral mischief. One evening, at tea, the word "cup" was uttered, and this was the first articulate sound spoken for twelve weeks. From this time the power of enunciation very gradually returned, and the girl is now liberal of speech—clear, distinct, and unhesitating in expression, as she was before the fever.

Mr. Rowen's patient was aphasic for a week, but mine continued so for twelve weeks. It is now three years since I recorded the particulars of my case, and I wrote when my patient was aphasic. I am happy to say she is now perfectly well. That the aphasia was caused by congestion of the cerebral convolutions where the faculty of speech is centred I never doubted, for I believe by a persistent exhibition of iodide of potassium with infusion of yellow chinchona bark, and an occasional grey powder, much was done to relieve it. I am glad of this opportunity of recording the favourable termination of what was considered at the time of its occurrence a unique case.

Mansfield.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASES OF POPLITEAL ANEURISM.

(Under the care of Mr. BRYANT.)

THE methodical use of compression of the artery above the sac for the cure of aneurism is of comparatively recent date, and to the Dublin surgeons belongs the credit of introducing the operation into practice and of showing the principles on which it acts; for in the early attempts at compression the object aimed at was to set up an inflammation in the artery, and to secure the consolidation in the sac by producing obliteration of the vessel; whereas the Dublin surgeons showed that the process of cure of aneurism by compression was identical with the so-called spontaneous cure, or that following the Hunterian operation. Still more recently digital compression has been introduced, and by some is regarded as superior to instrumental. Whether this be so or not, it is certain that it is often very effectual; and Mr. Bryant has met with two cases in which the patients cured themselves by digital compression. In favour of the employment of compression it has been argued that, even though it fail in curing the disease, it will increase the chances of success of subsequent ligature of the artery by rendering the collateral circulation freer. On the other hand, however, some surgeons maintain that it is of the highest importance to persevere with compression when once it has been begun, as ligature of the artery is not so successful after compression as when the artery is tied as a primary operation; but it is probable that more occult causes are at work to militate against a cure. Be this as it may, the following cases illustrate the value of both methods; and the second moreover shows that, in this instance at least, the ligation of the artery was very successful even after the prolonged use of compression.

For the notes of the following cases we are indebted to Mr. Henry Caddy and Mr. E. O. Giblin.

Aneurism of the popliteal artery cured by digital compression.—William R——, aged thirty-one, was admitted on February 15th, 1872. He stated that he never had rheumatism, nor was any similar disease known of in his family, but that three months ago, when lifting a sack of corn, he strained his right knee. For the time he felt no ill effects, but a month after he had occasional pain and numbness in that leg. A month afterwards he noticed a small swelling on the outer side of his right popliteal space. This increased in size, though sometimes larger, sometimes smaller, being largest when he walked much.

On admission he was a strong, healthy-looking man. Assumed no fixed position in bed. There was no swelling in thigh or leg, but on the outer part of his right popliteal space was an ovoid, distinctly pulsating tumour, about two inches long. The pulsation was not markedly expansile, and was arrested by pressure on the femoral artery. The skin around was normal. Circumference of leg over tumour measured 14½ inches, the same part in other leg 14 inches. In the posterior tibial artery distinct pulsation could be felt, but none detected in the anterior tibial.

Mr. Bryant saw the patient and suggested digital pressure of the femoral. Relays of willing students were immediately organised, and pressure was commenced at 4 P.M., lasting until 12 P.M. The fingers were assisted by a weight of about ten pounds. During the pressure the pulsation in the tumour was entirely arrested, but most probably there was a flow of blood on the compression changing hands.

Feb. 16th.—Patient got very little sleep last night, and says his leg feels rather benumbed. However, at 8 A.M. the digital pressure was again commenced, and continued up till 12 P.M.—that is, for sixteen hours. The pulsation in the aneurism was then less strong, and the tumour smaller and harder. Patient was very worn out from want of sleep, and he had an injection of half a grain of morphia.

17th.—The man had slept well during the night, and was better. At 8 A.M. the pressure was again commenced, and on changing hands at 8.30 P.M. it was found that there was no pulsation in the tumour. Compression was continued, however, until 12 P.M., when the limb was bandaged up in cotton-wool to keep it warm.

19th.—There was some numbness yesterday, but none now. No pulsation perceptible in the tumour, which has much diminished in size.

26th.—During the week has been well; the tumour feels hard and pulseless, and there is distinct pulsation in the anterior and posterior tibial arteries.

28th.—He was allowed to go home, with strict injunctions to lie still with his leg raised on a pillow.

Popliteal aneurism cured by ligature of the femoral after pressure had failed.—William P——, aged thirty-two, a fireman on board a steamer, was admitted on August 30th, 1872. He had always had good health, with the exception of two slight attacks of fever while abroad.

About five weeks before admission he felt a little pain immediately behind the left knee, and noticed a slight swelling there. This swelling slowly but gradually enlarged, and the pain increased, the knee at the same time becoming rather stiff. He continued his work up to the time of his entering the hospital, but for two days previously the leg, from the knee downwards, was considerably swollen.

On admission he was a healthy-looking man, well-nourished; and in the left popliteal space was an ovoid tumour, presenting all the characters of an aneurism.

Sept. 4th.—Swelling in the leg entirely subsided. A tourniquet, with two screw pads, applied to the femoral artery (about an inch below Poupart's ligament) at 2 P.M. to-day, and kept on till 10 A.M. on the 5th (twenty hours). The pulsation in the tumour was entirely checked, except for a

minute or two every hour when the pads were changed. Had two subcutaneous injections of morphia of a quarter of a grain each, but did not sleep much. Two sores have been caused by the pressure of the pads. No perceptible change in the aneurism.

6th.—Tourniquet applied again to-day for eight hours two inches lower down the thigh. Still no change.

7th.—On this and the eight following days a tourniquet with only one pad was applied for about nine hours each day, with ten minutes' intermission between each hour.

15th.—At the end of this day's pressure the aneurism feels more consolidated, but the pulsation is as much now as at first. The patient is getting exhausted, not sleeping much at night; and the sores caused by the tourniquet the first day are inflamed and painful.

Nothing more was done till the 19th, when pressure was again applied for six hours, with intermissions as before.

22nd.—Slough came away from sores on thigh; cold water dressing applied.

Oct. 4th.—Sores almost healed; inflammation subsided; and the patient feels well in himself. No pressure has been applied to the artery since the 19th ult. He has now been in the hospital a month, and has had altogether about 108 hours' pressure, and yet the tumour is as large, though more consolidated, and the pulsation in it as much as when admitted. Digital pressure commenced to-day at 9 A.M., and carried on by relays of students till 9 P.M. Pulsation controlled except when the students changed. Had two morphia subcutaneous injections, but no sleep during the time. Patient exhausted, and the thigh become inflamed again.

7th.—Tourniquet again applied for four hours to-day, and the five following days for the same time, the patient not being able to bear it on any longer.

15th.—Tourniquet applied for eight hours to-day.

22nd.—As pressure did not seem to be effecting a cure, the aneurism being in almost the same state as when admitted, and the patient was getting worn out, Mr. Bryant tied the femoral in Scarpa's triangle with carbolised catgut. The edges of incision were brought together with ordinary adhesive plaster, and a pad of lint strapped over the whole.

23rd.—Patient slept well in the night; no pain in the leg, which is quite warm; no pulsation over aneurism, or in the posterior or anterior tibial arteries.

29th.—Very slight pulsation to be felt over the aneurism, which is consolidated and a little smaller. The dressing taken off the incision to-day for the first time since the operation. Healing has taken place by immediate union, there being no evidence of any pus being thrown out over the surface, nor is there any thickening along the line of incision.

Nov. 1st.—No pulsation in the aneurism, but a little in the anterior and posterior tibial arteries. From this time nothing happened to retard his cure.

KILBURN DISPENSARY.

MALIGNANT DISEASE OF KIDNEY.

PRIMARY cancer of the kidney is almost always of the encephaloid variety, scirrhus and epithelioma being so rare that only one or two cases have been recorded. The diagnosis of a malignant tumour of the kidney is often very perplexing, owing to the adhesions which the mass contracts with the surrounding tissue and organs and to the great displacement of the other abdominal viscera. Frequently an examination of the colon, contrary to what is laid down in books, affords only a negative result, which is partly due to the displacement of the bowel, and partly to its compression between the tumour and the abdominal parietes. Another disputed point in primary renal cancer is the average duration of life. The assertion of some observers, and especially Walshe, that it runs a more rapid course than any other internal cancer, seems to be opposed to the evidence of a large number of cases. It has, indeed, been shown that its duration is longer than almost any other variety of internal cancer, which may be attributable to the duplicity of the organ, so that compensatory hypertrophy takes place very readily in the healthy organ when the other is disabled by disease. In the following case the classical symptoms were present—namely, hæmaturia and a tumour in the abdomen; but even these symptoms are not absolutely diagnostic of renal cancer, for Dr. William Roberts has observed a case where profuse hæmaturia co-existed with an enormous splenic enlargement.

R. H. P——, aged four years and five months, healthy and well-developed. The symptoms first noticed were pain and tenderness of the abdomen, and were attributed to worms. An ordinary worm-powder was given, and then blood was noticed in the urine, also a quantity of albumen. Upon examination a tumour was found on the left side extending from the kidney towards the pelvis. The tumour grew rapidly, causing great distension of the abdomen. The child died six weeks after the first symptoms were noticed. Upon making a post-mortem examination, a tumour was found occupying nearly all of the left side of the abdomen, and displacing the viscera. The liver was found much enlarged and covered with tubercles. The other organs were fairly healthy. The tumour weighed nearly two pounds, and was much like the shape of a kidney, and will be sent to the museum of the Royal College of Surgeons.

ROYAL SOUTH HANTS INFIRMARY.

CASE OF PSEUDO-HYPERTROPHIC PARALYSIS (OF DUCHENNE).

(Under the care of Dr. LAKE.)

AT page 44 we published the notes of another case of this rare and interesting disease, which was then under the care of Mr. Jonathan Hutchinson.

Andrew B——, aged nine years, a bright and intelligent looking boy, was brought to the infirmary on November 11th, 1872, on account of weakness of the lower limbs. Attention was at once arrested by his odd gait, and by the enormous size of both calves, which were rendered still more conspicuous by the knickerbockers which he wore.

He was subsequently admitted as an in-patient, and the following is a description of the case:—

The boy being stripped, the gastrocnemii, muscles of the thigh, glutei, extensor muscles of the spine, infraspinati, and rhomboidei are seen to be remarkably increased in size, being firm, hard, and resisting to the touch. The gastrocnemii are those most affected, the body of each cropping out boldly, especially on being put into action. The vastus externus of each leg is also exceedingly prominent, being next in order of the considerably developed muscles; next come the glutei, and then the extensor muscles of the spine, which latter cause the spinal groove to appear much sunken. From the hypertrophy of the oblique abdominal muscles, the abdomen is observed to be highly prominent, but this is due mostly to a considerable anterior curvature in the lumbo-sacral region, and which is shown by a plumb-line touching the spines of the vertebræ at the most prominent point falling far behind the sacrum. Muscles of the head, neck, and chest are not hypertrophied, neither are the muscles of the arm, except that the supinator longus may be a little more prominent and harder than natural, and his grasp is feeble and awkwardly performed. Electro-muscular contractility both of the affected and non-affected muscles unimpaired.

The integument of the extremities and parts of the trunk presents a curious mottled appearance, purple-coloured patches alternating with white being scattered about, while the backs of the hands and feet are of a bright rosy hue. Cerebral maculæ can be readily and conspicuously produced on most parts of the body. Cutaneous sensibility normal. Temperature (axilla) 98·8° F.

His gait, as before stated, is very peculiar; it is of a waddling side-to-side character, with limbs unnaturally far apart. He makes considerable noise in progression, and is easily fatigued. He has no increased difficulty in walking with his eyes closed.

In consequence of the weakness of the muscles of the back and legs, he has great difficulty in getting into bed, or standing on a moderately high stool, and for the purpose is obliged to lift one knee with his hands on to the bed or stool, and then draw up the other leg slowly after him. From the same cause he is totally unable to mount a small rocking-horse. If asked to sit on a low chair, he does so suddenly, and, when rising, places a hand on each knee for support, then raises his body with a sudden jerk backwards; but on being told to extend his arms, so as not to touch the

knees, he can scarcely get up, and, if sitting on the floor, cannot rise at all. It takes him a long time to ascend a small staircase, and is obliged to cling to the balusters for support. The following are the measurements of the limbs:—

Girth of calf of right leg	...	11¾ inches.
„ left „	...	11¼ „
Girth of thigh at middle right		14½ „
„ „ left		14¼ „
Girth of arm at middle of biceps		7 „

He does not complain of either pain or tenderness in the spine, nor of headache or pains or abnormal sensations in the limbs; has never had any serious illness or convulsions. The bones and joints are well formed, with no disposition to talipes. The pupils are equal, and respond normally to light, and no alteration in the fundus oculi is observable with the ophthalmoscope. The physical examination of his chest and abdomen detects nothing abnormal. Other functions normal.

The weakness in the legs has at all times been noticed, but latterly has become much worse. He was four years old when he first began to walk, and for a long time after was constantly stumbling and falling about, which he does occasionally even now. The increased size of the limbs was not observed till three years ago.

There is no history whatever of the same complaint in the family, nor of any particular tendency to nervous diseases. He has an only sister, aged twelve, who is perfectly healthy. His mother died eight years ago from some affection of the breast.

The treatment has been local faradisation of the affected muscles, cod-liver oil and iodide of iron internally. He has certainly improved in general health, but no alteration in the size of the limbs nor in the external condition of the muscles has taken place.

With regard to the diagnosis: the enlarged and hardened muscles, the general feebleness and weakness of the lower limbs, the waddling gait, the unnatural separation of the limbs in walking, the curved back, and the peculiar state of the capillary circulation, are symptoms sufficiently clear to show that this is a well-marked example of a very rare disease—a disease which has only been known to exist since 1861, when the attention of the profession was directed to it by Dr. Duchenne of Boulogne. The prognosis is very unfavourable. Dr. Duchenne states that if observed and treated in the first stage,—that is, the period of weakness, before the pseudo-hypertrophy has commenced—it may be cured; but if it has gone beyond this stage, and the muscles are already enlarged, it is beyond the reach of curative measures, at least none of the cases thus advanced have at all improved, the paralysis becoming general over the body, the patient ending by being unable to move himself off the couch, and generally dying from some intercurrent disease, which his debilitated condition renders him unable to resist.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 2ND, 1873.

DR. E. J. TILT, PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society: James Henry Bennet, M.D.; Francis Davison, L.R.C.P. (Armagh); Simon Fitch, M.D. (Portland, Maine); Robert Henry Moon, F.R.C.S. (Norwood); and Richard Wilkins (Madras).

Dr. HEYWOOD SMITH exhibited a Fœtus with a Diaphragmatic Hernia. It was a male and a fifth child. The first only lived an hour, the three next were born dead, and this only lived three-quarters of an hour. On opening it, the liver was found fairly normal; a prolongation posteriorly passing upward was embedded in the diaphragm. The stomach was lying nearly perpendicularly. There was only a short portion of small intestine, and about the lower half of the large. On opening the thorax, all the rest of the intestines were seen occupying its left side. The heart was placed centrally, taking up the space of the right lung, while the left lung was rendered even smaller by the large space taken up by the intestines, which were found to have passed upwards through an opening in the left posterior aspect of the diaphragm just large enough to admit the tip of the little finger. To the right of this was seen the spleen, dipping into and filling a sort of pocket at the posterior margin of the diaphragm.

Dr. SQUIRE exhibited an earthenware Bedpan, modeled by Phillips, of Oxford-street, on the design of a nurse, to allow free ablution; also a linen Breast-supporter, invented by the same nurse, and found to be very useful.

Dr. HEYWOOD SMITH did not know whether Dr. Squire was aware that there was a bed-bath made by Maddox, of University-street, which was exceedingly convenient, and much lighter than the pan now exhibited.

Dr. PROTHEROE SMITH exhibited his Pneumatic India-rubber Plug for facilitating the introduction of cylindrical specula. It forms a soft elastic cushion in the end of the speculum, and renders the introduction of it painless to the patient.

Dr. AVELING showed a drawing demonstrating what he considers to be the best mode of opening the vein so as to enable the operator to pass a tube into it with ease in transfusion. He stated that he had transfused blood a second time by the immediate method, and that this plan of opening the vein was the result of his further experience. He seizes the exposed vein with a pair of fine forceps, and incises it so as to form a V-shaped flap. Although the opening thus made may become obscured by blood, it is still readily to be found by using the forceps as a director, and passing the tube down it into the vein.

Dr. SAVAGE (Birmingham) remarked that in a case of transfusion which had occurred in his practice he had used Dr. Aveling's syringe. He found no difficulty in opening the vein, nor in inserting the nozzle. He exposed the vein by transfixing the skin, and then passed a probe under it. It seemed to him that nothing could be simpler or more successful than using Dr. Aveling's syringe.

Dr. AVELING thought it unnecessary to pass a probe under the vein, and that the less the vein was disturbed the better.

The PRESIDENT congratulated the Society on the re-admission of Dr. Henry Bennet, the importance of whose scientific work could be best estimated by the very different character of the books on the diseases of women published before and after 1845, when Dr. Bennet published his little work "On Inflammation, Ulceration, and Induration of the Cervix." In that work he taught the profession of this country the two great lessons he had learnt in the Paris hospitals—(1) That diseases of the womb must be studied, like other diseases, by every available mode of investigation; and (2) that the treatment of disease of the womb should be, to a great extent, surgical. These views have been adopted by all the eminent men who have written in English on diseases of women since 1845, and a school of gynæcology had sprung up which he called English, comprising American, Scotch, and Irish authors, and which he believed to be richer and more varied than that of any other country. Dr. Henry Bennet was the founder of this school, and it was a matter of congratulation for the Obstetrical Society that his unexpected recovery again enabled him to take an active part in its labours.

Mr. GEORGE ROPER brought forward

A CASE OF HYPERTROPHIC ELONGATION OF THE CERVIX UTERI AT THE FULL TERM OF PREGNANCY.

E. C——, aged twenty-two, a primipara, was taken in labour on the morning of November 3rd. The next day the membranes ruptured naturally, and the pains became strong and frequent. The cervix uteri protruded from the vulva to the extent of about three inches; it was in circumference about the size of an ordinary adult male wrist, the portions without and within the vagina measuring about four inches in length. The canal of the cervix would just admit the forefinger, but no presentation could be felt; the canal was too long to allow the finger to pass up to the uterine end. The structure of the cervix was in a firm, hard, gristly condition; and there seemed to be no probability of its expansion under the natural efforts of the uterus. Dr. Barnes saw her when she had been in labour thirty-six hours, and slight expansion had taken place; the pains were not violent, and there were no symptoms of expansion. Further

delay was advised; but should further expansion not take place free incision of the lower part of the cervix was recommended. After waiting four hours, seven incisions in the os externum were made, the tissue cutting with a gristly sensation. After the operation a gradual dilatation took place, occupying sixteen hours, at the end of which time the patient was delivered by forceps. The duration of the labour was fifty-two hours. The child was alive, and the mother made a good recovery. The author believed such a case as this was not amenable to treatment by means of water- or air-bags. Two months after delivery the uterus was found fairly involuted, and the cervix slightly larger or longer than usual. The portion which had been elongated hung down into the vagina like a shriveled skin; this was removed. The woman has since had several children after easy labours.

Dr. BRUNTON thought that in this case great benefit might have arisen from putting the patient in the knee-elbow position. He had met with a similar case, and had found this method of treatment successful, the prolapsed uterus passing into its natural position, and labour terminating in a short time.

The PRESIDENT wished to know what was the effect of pregnancy in preternatural elongation of the cervix—whether the result of the puerperal tissue-transmutations was to shorten it in a manner analogous to that softening of a hard cervix which we had repeatedly seen to follow pregnancy.

Dr. BARNES said that these cases were sometimes cured by labour and sometimes not. Dilatation would occasionally answer as a mode of treatment, but incisions were now and then necessary. He had seen a case in which protruded cervix formed such a large mass as to be mistaken by the midwife for the whole uterus, and he believed that this mistake had often been made.

Dr. PLAYFAIR said that, with regard to incisions, it was right to remember that in such cases as that now related and in cases of rigid cervix they were very different things. In the latter the cervix was stretched and thin, and the incisions would be merely linear; in the former each cut would be the entire length of the hypertrophied cervix—in this case nearly four inches—and the risk of septic absorption would be of course materially increased. He did not make these remarks to criticise the practice adopted, as he believed it was the only means of overcoming a very formidable difficulty.

Dr. MADGE said it was generally supposed that lacerations of the cervix uteri during labour, without any ill consequences following, was a common occurrence; that being the case, there was not so much fear in making incisions in the cervix when rigid and unyielding.

Dr. PROTHEROE SMITH could confirm the remarks of Dr. Barnes, having for many years been in the habit of incising the cervix when it formed an obstacle to the progress of labour, and in no case had he found the wound to extend beyond his incision. He had seen a case in which an unyielding cervix had been completely torn from the body of the uterus. He advocated the plan of cutting only laterally to avoid wounding the peritoneum, and of using the douche freely afterwards to prevent absorption of putrid lochia.

Mr. R. EARDLEY-WILMOT read a paper on

THE FILLET, OR LOOP, AS AN OBSTETRIC AID; WITH ESPECIAL REFERENCE TO A NEW MODIFICATION OF THE INSTRUMENT.

The author pointed out that the fillet was an instrument of great antiquity, but that it had fallen into disuse; that it was treated in our text-books with silent contempt or unqualified condemnation. In spite of this he believed the fillet to be a useful instrument. It may be used more in cases where slight or great force is required, and, as a general rule, in any case where the head is clear of the os uteri. It is lighter, more portable, and can be used more easily than the forceps, and it does not frighten the patient. If desirable, it can even be used without the patient's knowledge. He had employed it in twenty-five cases; all the children had been born alive, and in only one was there slight rupture of the perineum. The fillet, in its old form, he believed to be difficult of introduction and adjustment, and liable to injure the child. Dr. Westmacott had improved it by rendering the instrument capable of being easily removed, one end of the loop being made so that it can be detached from the handle; but the difficulty of adjusting still remained. This the author overcomes by having the handle of the fillet divided longitudinally, so as to leave one end of the whalebone loop attached to each section of the haft. The two portions are separable at pleasure, or united, when compressed, by steel pins projecting from one half of the handle and perforating the other. The instrument may be introduced as usual. Let one half of the handle then be taken in each hand, and by a gentle sawing movement in the direction required, and by pressure on each limb alternately, the loop is readily brought into its due position.

Dr. WESTMACOTT said that four years ago he had shown the Society his fillet, with the improvement of being able to remove the whalebone loop from the handle. The idea struck him then of dividing the handle, but, wishing to keep the instrument as simple as possible, he had abandoned it. He had since added a strong india-rubber ring, which slides up and down the loop to make it more portable and to compress the head of the child. He objected to the author's plan of applying the loop over the chin, as it might slip towards the neck and strangle the child. He usually applied it over the eyebrows or nose, and he had not seen any other bad result than a slight mark, which disappeared in a few days. He thought the loop of the instrument now exhibited too thin. Its sharp edges might scratch the skin, or twist, or split. He had used his own fillet sixty or seventy times, and with favourable results in almost every case.

Dr. AVELING thought obstetrical writers very properly omitted any lengthened description of the fillet. Compared with the forceps it was an unscientific instrument. Its liability to slip had been observed long ago, and Levret, to prevent this accident, added a third branch. This same modification had been a short time since reinvented by Dr. Sheraton, and, he was sorry to say, also patented. If the fillet were hooked over the chin, as recommended by Mr. Eardley-Wilmot, there was a chance of its slipping round the neck and producing strangulation; and if over the nose or brow, as advised by Dr. Westmacott, it might injure the former, or slip off the latter. The instrument might answer where slight traction was required, but he would be sorry to have to rely upon it where largeness of the fœtal head and rigidity of the maternal passages demanded the exercise of much force.

Dr. PLAYFAIR believed that the reason why the fillet did not sink into well-merited oblivion was the appearance of simplicity about it, and the fact that it could be used without the knowledge of the patient, this latter being, in his opinion, one strong reason why it should not be used. But the truth was, as Dr. Aveling had remarked, that the fillet was essentially an unscientific instrument. If it were applied when the head was high in the pelvis, traction over the face would necessarily produce extension of the chin before the time of that change had arrived. Another strong objection to the fillet was that it drew attention from the forceps—an instrument perfect in its adaptation to the natural mechanism of labour.

Mr. EARDLEY-WILMOT found his own fillet much more easy to use than Dr. Westmacott's. He did not think there was fear of strangling the child or of the loop slipping, nor did he think the fillet an unscientific instrument, or likely to interfere with the natural course of labour. He never intended to place it in competition with the forceps as a means of delivery in difficult labour.

Dr. E. H. M. SELL read a paper

ON A CASE OF COMPLETE UTERUS BICORNIS, THE SEPTUM EXTENDING INTO THE ONE COMMON CERVIX; PREGNANCY OF THE RIGHT HORN.

This case occurred at the General Hospital of Vienna, and the diagnosis of it was made out by Professor C. Braun while the patient was under chloroform. Owing to the narrowness of the pelvis delivery was very difficult, and the child had to be extracted by turning. The conjugate diameter of the pelvis measured only two inches and a half. The placenta had also to be removed by the hand, as the uterus was powerless. On the sixteenth day after delivery the patient left the hospital well.

THE Grocers' Company have just given one hundred guineas to the funds of St. George's Hospital.

Reviews and Notices of Books.

Clubfoot: its Causes, Pathology, and Treatment. By W. ADAMS, F.R.C.S., Surgeon to the Great Northern Hospital, &c. Second Edition. London: J. and A. Churchill.

THE first edition of this work was published in the year 1866, and is so well known to the profession as the Jacksonian prize essay of the Royal College of Surgeons for the year 1864, that we will proceed at once to examine the edition before us.

In his prefatory note, the author states "that essentially the form and general arrangement of the subject as originally issued has been preserved. Some chapters have been added to, especially that on the Reparative Process in human tendons after tenotomy," and, "finally, the work has been carefully revised." Now, the first edition contains 422 pages, which have been increased to 464 in the second. Of the 42 additional pages we find that 10 in the Appendix, from page 371, have been reprinted from the Pathological Society's Transactions; and in Chapter II., from page 26, we have a transcription of 10 pages from the author's special treatise on the Reparative Process, &c., which was published in 1860.

From page 37 there are eight additional pages. Here the author expresses his views as to the rarity of non-union and adhesions after the operation of divided tendons; and his remarks are well worthy of consideration. He then proceeds to refute Mr. Barwell's statements as to adhesions after division of tendons by numerous references. Whilst we on scientific grounds concur in the author's views, we may, perhaps, question his good taste in introducing a personal element into a work which bears the insignia of a prize essay. He concludes this chapter by a reference to the differences of opinion amongst surgeons as to the rate of extension after tenotomy, some advocating immediate, and others gradual, extension. We fully endorse what he says: "That the rate of extension should be regulated by the activity of the reparative process in the divided tendon; and that this important part of the treatment must be left to the judgment of the surgeon."

In the next chapter (III.), on the Relative Merits of Tenotomy and Mechanical Extension in the Treatment of Clubfoot, we observe no additional matter except a statement at page 60, with respect to Mr. Barwell's practice as differing from his theory on the evils of tendon cutting. In justice to Mr. Barwell it is but fair to say that he may, like many other experienced surgeons, have had occasion to modify his published views, but to pause before republishing them.

Chapter IV., on Non-congenital, Spasmodic, and Paralytic Talipes, contains no alteration except the mention of a new case in the Appendix, and the abstraction of four lines at page 71 on matters that are familiar to all practical surgeons.

The fifth, sixth, eighth, ninth, tenth, and eleventh chapters appear as in the first edition; but in the seventh chapter, on the Treatment of Talipes Equino-Varus, the author recommends the reversal of the instrument generally used, to obviate (as he thinks) inversion of the foot by uplifting the fourth and fifth metatarsal bones. With reference to this point, we think that the instrument in question is capable of great improvement.

Chapter XII. contains three additional facts in reference to a case described in the first edition.

In Chapter XIII., on the Operative Treatment of Congenital Talipes Varus, at pages 234 and 235, the author makes some remarks respecting the subcutaneous section of ligaments in that deformity, and adduces a case in support of division of the deltoid ligament. He does not recommend that operation in infants, but thinks that a free division of the calcaneo-cuboid ligament near its calcaneoid attachment would be useful in addition to tenotomy and division of the plantar fascia, in some cases where the arch of the foot is much increased and rigidly held in this contracted condition. (The latter operation, however, has not been practised by himself.) In support of his views, he quotes the late Professor Streckbeesen of Zurich, who attached more importance to the division of ligaments than to that of tendons in the case of clubfoot. He (the Professor) was generally able to bring the foot into its normal position after section of the deltoid ligament and other ligaments connecting the inner malleolus, astragalus, and navicular bones.

In the next chapter, at page 254, the author draws attention to the mechanical condition of the foot, and reviews the anatomical deviations of the parts concerned in the production of varus; and at page 265, as to treatment in relapsed cases, he recommends the cog-wheel movement to be placed on the inner side of the ankle-joint, to obviate pressure on the outer side of the foot—thus reversing the ordinary mode of applying the instrument.

In Chapter XV. we find no additional matter except at p. 274, where the author mentions Dr. Aveling's ingenious instrument, called a talivert, for combining a variety of movements.

The sixteenth, seventeenth, and nineteenth chapters remain intact; but in Chapter XVIII., at page 325, instead of describing the *modus operandi* of the boot required, he describes the necessary article for the after-treatment of congenital varus.

In the last chapter, on the Pathology and Treatment of Non-congenital Talipes Calcaneus, the author has omitted a paragraph deprecating the late Professor Syme's views, who disapproved of gradual extension after section of the tendo Achillis, but recommended the patient to walk on the third day after the operation.

We now come to the Appendix. The first two notes, on dissections illustrating the reparative process in human tendons after tenotomy, are reprinted from the Pathological Society's Transactions (vols. xv. and xxi.) Note 3 gives a description of two legs of a clubfooted child, showing good union after section of the posterior tibial tendons at respective dates; this is illustrated by a plate marked 5. Note 4 is transcribed from the first edition. The cases in illustration of non-congenital spasmodic and paralytic talipes which appear in the first edition are rearranged through the insertion of two additional cases; and Case 19, marked 17 in the first edition, is completed by a description of the dissection of the patient.

The author concludes with a report by Mr. R. Cox, M.R.C.V.S., on a case of tenotomy in a racehorse, the after-treatment of which, however, rather supports the late Professor Syme's views as to immediate extension after tenotomy.

Of the additional plates, we discover that four have been transferred from the author's special treatise published in the year 1860, and that the fifth is a well-executed original (chromo-lithographic) drawing by Mr. D'Alton, showing the posterior tibial tendon in two stages of repair after subcutaneous section, at intervals respectively of four months and a half and ten weeks before death. Six new figures are to be found in the Appendix, two of which (figs. 79 and 80) represent an anterior and posterior view respectively of a case of talipes equinus, with flexion of the toes, following fever; the third (fig. 81) shows the results of the surgical treatment; the fourth and fifth (figs. 82 and 83) a case of talipes equinus following snake-bite, before and

after treatment respectively; and the last (fig. 106) shows the position of the leg of a racehorse affected with talipes equinus before tenotomy. This is accompanied by an anatomical sketch displaying the relations of the superficial and deep tendons.

In concluding this notice we have avoided expressing an opinion upon several points which the author has raised, and which are open to question; but we give him due credit for his labour in bringing out a second edition.

Autumnal Catarrh (Hay Fever.) With three Maps. By MORRILL WYMAN, M.D., late Hersey Professor Adjunct to the Theory and Practice of Medicine in Harvard University. New York: Hurd and Houghton. London: Trübner and Co. 1872.

DR. WYMAN'S book may be said to form a very interesting and carefully-executed monograph on this subject. One of the most prominent points discussed by the author is the geographical distribution of the disease, and the information on this head is represented in the three maps embellishing the volume, in which those regions believed to be free from autumnal catarrh are represented by uncoloured spaces. Dr. Wyman describes two forms of annually-recurring catarrh in the Northern United States, the first being the "summer cold" or "rose cold," in May and June, which closely resembles, but is probably not quite identical with, the *Catarrhus æstivus* of this country, and the *Catarrhus autumnalis* of August and September, popularly known as hay fever, which, by the way, it is not. The first-named affection, as it exists in this country, was described by Dr. John Bostock in 1819, in the tenth and fourteenth volumes of the Medico-Chirurgical Transactions; the other—the autumnal—form was originally described by Dr. Wyman in his lectures at the Medical School of Harvard's University in 1854, and subsequently in 1866, in a paper read at the annual meeting of the Massachusetts Medical Society in Boston. Dr. Wyman states that he had himself long been a sufferer from it. It does not appear to be at all an uncommon disease in America, to judge from the number of cases contained in the volume before us. Among many other cases we encounter those of Daniel Webster, who is said to have had it annually for twenty years, the Rev. H. W. Beecher, and others. It has nothing to do with hay as a cause, for the hay in New England has generally been cut and got in a month before its appearance, and it is only in exceptional cases that the smell or dust of hay, any more than any other dust, produces uncomfortable sensations in the subjects of the disease. The symptoms, local and general, are first described, then its annual course, its geographic and chorographic relations, the influence of place upon the disease, its causes, diagnosis, and treatment. Sea air, so beneficial in its influence upon the hay fever of England, exerts but little curative effect on the autumnal catarrh. The influence of family predisposition seems to have been made out. Little, however, appears to be known of the origin of this singular disease. Its characters may be summed up as follows:—August and September are the times of its annual attack; the affection of eyes, nose, and throat is severe; the edges of the eyelids are inflamed and the eyelids puffy; it is attended with spasmodic cough, and asthma is common towards its close; there is itching, with eruptions, of the skin. It is rarely relieved at the sea coast or in large cities. The paroxysms are not produced by new-cut hay, and it is seldom produced by the aroma of flowers. Lastly, entire relief is obtained in certain regions: a removal to a non-catarrhal region is the great, not to say the only remedy. The air of mountains at a higher elevation than 800 feet above the seaboard has, as a rule, a remarkably beneficial effect, but there are other circumstances than mere elevation on which this immunity depends. Of the numerous remedies that have been tried as preventives, quinine appears to have been the most successful. Dropping a solution of quinine into the nostrils, as recommended by Helmholtz in "June cold," is not known, however, to have succeeded in relieving the nasal symptoms of this disease.

Dr. Wyman's little book contains much information on the alleged causes of autumnal catarrh and the affection that occurs in England, and the subject of these curious disorders is discussed in a painstaking and interesting manner.

OUR LIBRARY TABLE.

On Hereditary Transmission of Structural Peculiarities. By JOHN W. OGLE, F.R.C.P., Physician to St. George's Hospital.—We ought long ago to have noticed a very interesting little paper, which originally appeared in the *British and Foreign Medico-Chirurgical Review*, but is now published separately, by Dr. John W. Ogle, "On Hereditary Transmission of Structural Peculiarities." In this pamphlet Dr. Ogle gives a remarkable series of cases that have fallen under his observation. In the first instance he mentions a case of congenital defect in the ungual phalanges of the first and second fingers of both hands and of the two distal phalanges of the third and fourth fingers. None of the fingers had nails. Somewhat similar defects existed in the toes. Two of the brothers and a sister of this patient inherited the same defect, and Dr. Ogle took great trouble in obtaining the "family history," from which he ascertained that analogous malformations in nephews and nieces and in cousins had existed for two or three generations. The case is an extremely interesting one, and has been well worked out. Proceeding from this, Dr. Ogle has collected a great many cases in which accidental mutilations and deformities, both in men and animals, have been propagated to the offspring. Some of them are most curious and instructive, especially when contrasted with the singular and constant absence of inherited defect in the case of the Jews, who are, so far as we know, always born with a well-developed prepuce, though circumcision has now been practised for so many centuries. Dr. Ogle seems inclined to believe, from his researches, that mental emotion in the mother is capable of affecting the fœtus in utero, and gives a series of cases in which it was rendered more or less probable. There is an appendix containing some remarks upon the breeding of lion cubs. These, it appears, are often born in the London Zoological Gardens with cleft palate, whilst those born in the Dublin Gardens and in travelling menageries are generally healthy. Dr. Ogle quotes the opinions of Barker, Haughton, and others that this is due to the goat's-meat on which the lions in the Dublin menagerie are fed supplying the requisite amount of phosphates. We should be rather disposed to attribute it to the better mode of feeding adopted, the meat being given only twice a week instead of daily, as in London, the former proceeding being much more in accordance with the usual habits of the animal. Something is, of course, attributable to the fineness and size of the parents, the male lion at Dublin being an uncommonly fine one. We regret we have not space to quote any of Dr. Ogle's cases, but those who are interested in such points will find the whole paper well worth perusal, as it brings together many previously scattered but well-authenticated statements.

Annuario delle Scienze Mediche riassunto delle più importanti pubblicazioni dell' anno. Per i Dottori P. SCHIVARDI e G. PINI. Anno III., II., 1872. Milano, Roma, Napoli, Palermo. Dr. Francesco Vallardi, Edit. 1873.—Our own

publishers might take a hint from this publication. It is a small, handy volume, easily carried in the coat pocket, and its character is sufficiently indicated in its title. Information on a variety of subjects connected with medicine and surgery has been culled from Italian, French, German, British, and other publications. The selection and arrangement of material are good, and those acquainted with Italian may consult it with the object of refreshing their knowledge of that language, and keeping themselves *au courant* with the progress of medical and surgical science during the past year.

The Popular Science Review. Nos. 47 and 48 (April and July). Edited by HENRY LAWSON, M.D. London: Robert Hardwicke.—The last two numbers of this Review contain, in addition to several other papers of more or less interest, an article, in two parts, by Mr. St. George Mivart, F.R.S., on "Man and Apes," in which this very vexed subject is discussed with much care and minuteness from various points of view. Mr. Mivart concludes that, "however near to apes may be the body of man, whatever may be the kind or number of resemblances between them, it should always be borne in mind that it is to no one kind of ape that man has any special or exclusive affinities." Let the preponderance of resemblance be in which it may, there can be no question that it is "*not* presented by the much vaunted gorilla, which is no less a brute and no more a man than is the humblest member of the family to which it belongs." Dr. Leith Adams's paper on the Mental Powers of Birds in the July number of the same Review will be read with interest.

ABSTRACT OF A

Lecture

ON

TERTIARY SYPHILIS AND SYPHILITIC CACHEXIA.

Delivered at St. Mary's Hospital, July 23rd, 1873,

BY S. A. LANE, F.R.C.S.,

CONSULTING SURGEON TO ST. MARY'S HOSPITAL, AND TO THE LONDON LOCK HOSPITAL.

MR. LANE commenced his lecture by stating that both in consultation with other surgeons and at the College examinations he was much struck with the unsettled state of opinion in the diagnosis and treatment of tertiary syphilis. The principal difficulty seemed to be in deciding whether any particular case under notice should be classed with the secondary or tertiary group of symptoms, and, again, whether iodine or mercury should be the remedy to be relied upon. Some, he found, considered it immaterial which of these remedies were administered, while others would prescribe them in combination, or in alternation with each other. He considered it so essential that clear and distinct notions should be held upon these points that he had placed before them two tables in which the tertiary and secondary affections were respectively grouped, and their appropriate remedies mentioned. Each group was also illustrated by numerous drawings taken from patients in the Lock Hospital.

Morbid changes observed in secondary syphilis.

Affections of skin	Erythematous—Roseola. Papular—Lichen. Tubercular—Tubercles that may desquamate, ulcerate, or encrust. Scaly—Psoriasis, lepra. Pustular—Ecthyma.
Affections of mucous and semi-mucous membranes.	Superficial white aphthous-looking ulcers on the tonsils, soft palate, and fauces—Superficial ulcers on the sides of the tongue and angles of the mouth—Mucous tubercle on condylomata on semi-mucous surfaces—Deep excavated ulcers of tonsil.

Iritis—Muscular pains—Arthritic pains—Pains in bones—Periostitis—Nodes.

The above table contains the principal affections of constitutional syphilis termed secondary, in which the venereal poison still exists, and may, therefore, be communicated by cohabitation, and transmitted to the offspring, and in which mercury is beneficial, and iodine of but little or no service.

In tertiary syphilis, syphilitic cachexia, or sequelæ of syphilis, the following pathological conditions are found:—

Inflammation of fibrous membranes.	Periostitis—Resulting in nodes. Caries and necrosis of bone. Affecting fibrous tissues of joints—Arthritis. Affecting fibrous tissues of testicle—Orchitis. Affecting fibrous tissues of globe of eye—Sclerotitis.
Affections of skin and mucous membranes.	Rupia—Cachectic ulcers of skin. Rapid ulceration and sloughing of the soft palate, fauces, pharynx and larynx; of the rectum, vagina, nymphæ, and labia.
Deposits of fibro-plastic lymph imperfectly organised.	In the areolar tissue (subcutaneous or submucous tubercles). In muscular tissue: more frequently met with in the tongue, and occasionally in other muscles; also met with as post-mortem appearances in the liver, spleen, kidneys, lungs, and other viscera.
Lardaceous and waxy deposits.	Occasionally found in the post-mortem examination of the bodies of persons of dissipated habits.

In the above table are classed the pathological changes which occasionally present themselves in patients who have passed through the primary and secondary stages of syphilis, but in whom the venereal poison no longer exists, and cannot therefore be transmitted. The remedies required in these affections are especially iodine and sarsaparilla, and mercury is injurious.

There might be, he said, a few exceptions to the strict line drawn in these tables, but the exceptions could be readily understood, and rather tended to prove the rule—for instance, periostitis and nodes would be found in both tables: when of early appearance and associated with secondary affections, mercury should be given; when of late date and co-existing with tertiary affections, then iodine should be the remedy. Tubercular and ecthymatous eruptions would occasionally be found to run into rapid destructive ulceration, and this, again, indicated the supervention of syphilitic cachexia. Again, iritis would be sometimes met with in tertiary syphilis; it would be found, however, that the affection commenced in the sclerotic or fibrous coat, and had extended to the iris. In all these cases the predominant co-existing symptoms would always indicate the constitutional condition of the patient, and the treatment required. The lecturer attributed the unsettled state of opinion of which he complained to the variety of views taken by different authors on syphilitic affections. Some pathologists objected altogether to the division of the symptoms into secondary and tertiary, and held that, as they all were consequent upon the primary infecting chancre, the term secondary should include both groups. Dr. Wilks also objected to this division, and preferred to include all primary and secondary affections under the term of syphilis, and all the tertiary of other authors, with the exception of the fibro-plastic deposits, under the title of sequelæ of syphilis. Many practitioners who did admit the classification of the symptoms into secondary and tertiary had, he observed, not made up their minds to which group some of them properly belonged. He thought, however, good practical grounds existed for the divisions explained in the tables, and by the accompanying drawings.

With respect to the true nature of syphilitic cachexia, the lecturer confessed that we were still in ignorance. He himself was in favour of considering it a dyscrasis of the blood, and would venture to advance a theory founded upon the well-known views of Liebig with respect to the mode of action of animal poisons on the blood. He compared it to the formation of yeast by fermentation in a saccharine solution to which gluten had been added. So long as any gluten remained, yeast could be formed, but its formation ceased when the gluten was exhausted, and could be renewed only by the addition of more gluten. Syphilisation had taught us that the venereal poison, like that of variola and vaccinia, could not be produced in any individual to an indefinite extent, and that the power of generating it became sooner or later exhausted, when he was said to be syphilised. Applying these data, Mr. Lane explained his theory to be that the act of generating the venereal poison in its primary and secondary states had completely exhausted the blood of one or more of its normal constituents not readily reproduced, and that this deteriorated blood constituted the syphilitic cachexia or tertiary syphilis, the morbid condition under consideration. He also suggested that mercury might possibly prey upon the same unknown constituents of the blood, and thus prove beneficial by taking from the venereal poison that upon which it depended for its formation. This view of the action of mercury would support the very general opinion that tertiary syphilis was the result of the joint action of syphilis and mercury on the system, and would also satisfactorily explain why mercury should not only cease to be beneficial, but should prove to be injurious. Mr. Lane thought that this theory, however imperfect, might serve to account for many of the phenomena observed in tertiary syphilis, such as the inability of patients suffering from this malady to transfer the poison of syphilis to others, also the extreme difficulty of inoculating such persons with the primary venereal poison; and, again, why restorative remedies—iodine, sarsaparilla, steel, and quinine—combined with good living and other stimulants, should be found more beneficial than mercury in the treatment of these cases.

Having explained that his theory would lead him to attribute the debilitated and asthenic condition of the sufferers from tertiary syphilis to the absence of certain unknown constituents of the blood, he proceeded to observe that the principle upon which the treatment should be conducted was to restore these constituents, and that, consequently, all evacuants, and especially preparations of mercury, all debilitating influences, all wear and tear of system, all overexertion of mind or body in pleasure or business, should be avoided; and that, on the contrary, tonic, stimulant, and restorative measures, combined with good generous diet and judicious hygienic regulations, were the remedies to be depended upon. The medicines which were found of most service were iodine and sarsaparilla; their *modus operandi* was not understood, but they were of far more value than the ordinary tonics—steel, bark, and the various other bitter and astringent remedies. With regard to the salts of iodine, the lecturer's experience led him to say that they were powerfully stimulant, and had even a tendency to produce inflammation. He related a case in proof of this where the iodide of potassium, given in three-grain doses, was followed three successive times by an inflammatory attack, and was obliged to be relinquished in consequence. In reference to the large doses in which this medicine was sometimes given in the present day, he remarked that twenty-five years ago, having heard that some French surgeons administered this remedy in two-drachm doses, he had given it in that quantity thrice daily to one patient in the Lock Hospital for three weeks in succession without noticing any more marked effects, beneficial or otherwise, than from the ordinary five- or ten-grain doses. He was convinced, however, that some degree of caution was necessary in administering this remedy in large doses. He had seen one case where a gentleman of his own accord took as much as ninety grains thrice daily for years, and usually with impunity, but in whom the poisonous effects showed themselves from time to time by attacks of hyperæsthesia, and ultimately of temporary paralysis of the lower extremities. Sarsaparilla, he observed, was, in his opinion, greatly undervalued by many surgeons as a remedy in tertiary syphilis. He was old enough to remember, before iodine was introduced, when surgeons were obliged to depend upon this drug alone in the treatment of these cases, and he was glad of this opportunity of expressing his decided opinion of its value. Before the introduction of iodine he had fully tested the powers of sarsaparilla as compared with those of steel, bark, and other tonics, by treating cases in the Lock Hospital, under the same hygienic conditions, alternately by the latter remedies and by sarsaparilla, with the result of convincing him that they possessed little or no efficacy, and that sarsaparilla was the most powerful remedy then known in the treatment of tertiary syphilis.

Mr. Lane, having made these general observations on the subject of treatment, and having laid down the principle upon which it should be conducted, gave the details of the plan he had found most generally useful. It consisted of administering the iodide of potassium in doses of from three to ten grains, taken in the third of a pint of the simple or compound decoction of sarsaparilla as a vehicle, three times daily, alternating with a pill of two grains of quinine and three grains of confection of opium, also taken thrice daily. He had found opium of service not only in allaying pain and irritability, but also in moderating the secretions, and thus preventing unnecessary waste. Exceptional cases might require the iodide to be increased to fifteen- or twenty-grain doses. Diarrhœa, which is not unfrequent, must be met by larger doses of opium and the ordinary astringent remedies. The local treatment he considered of secondary importance, and did not feel warranted in occupying their time with it; the general principles of surgery would sufficiently guide them.

After referring to some remarkable cases of disease, Mr. Lane concluded by observing that the task he had set himself was to make clear to his hearers in what class any given case of constitutional syphilis should be grouped, and how it should be treated. If he had at all succeeded in his endeavour, he would have the satisfaction of feeling that their time and his had not been altogether thrown away.

REPORT
OF
The Analytical Sanitary Commission
ON
DISINFECTANTS.

No. I.

THE possibility of another cholera epidemic renders it our duty once more to invite our readers' attention to the subject of disinfection. In doing so we are not anxious to state new views, or to discuss the subject fully from the point of view of pure science. We merely aim at supplying practical hints for practical purposes, and therefore do not hesitate to place before our readers much that is already familiar to them.

In pursuance of this aim we have collected and examined some of the more important of the disinfecting agents now in use, and propose to point out as briefly as possible the advantages and disadvantages peculiar to each. Before doing so, however, it is necessary to advert to the present state of our knowledge in regard to the action of disinfectants generally, and to the conditions under which they are required. The state of our ignorance would, unfortunately, have been the more accurate phrase, in spite of the great amount of really good work that has been done in the last few years.

The term "disinfectant" is somewhat loosely applied to substances possessing respectively three distinct properties. These substances may be more accurately classified as follows:—

1. *Deodorisers.*—Substances which remove noxious smells without necessarily destroying the true noxious matters which accompany those smells.

2. *Disinfectants proper.*—Substances which destroy the noxious matters arising from fermentation, putrefaction, or the infection of disease, by some direct chemical process

which converts them into simple and innoxious bodies. Chlorine and oxygen are typical agents of this class.

3. *Antiseptics*, or *colytics* (as Dr. Angus Smith prefers to call them).—Substances which destroy low forms of organic life, and which therefore prevent or arrest putrefaction and fermentation, and deprive of activity all disease germs. Corrosive sublimate and the tar acids (carbolic and cresylic) are examples of powerful antiseptics.

It is impossible in this place to avoid a passing reference to the zymotic theories of fermentation, putrefaction, and infection, which have been so keenly contested of late years. The brilliant train of research, originated by Pasteur, has left no doubt of the active agency of organised bodies in the two former of these processes, and although the zymotic theory of epidemic disease is less surely established, it has been supported by so considerable a collection of facts as to have acquired a certain degree of probability, to say no more. Indeed, the action of antiseptics is itself an argument of some value in its favour, for if a certain agent—carbolic acid, for instance—stops fermentation, stops putrefaction, and stops the spread of infection, it is difficult to avoid applying to the third case the reasoning known to be valid as regards the first two. For our present purpose, at any rate, it is convenient to assume the truth of the theory, even where proof is still imperfect, and this we have already done tacitly in our definition of antiseptics.

In studying the action of disinfectants proper (for which a distinct name might advantageously be coined), we soon meet with one of the greatest difficulties that beset the subject of disinfection. For disinfection to be effective, a definite and often a considerable quantity of the disinfecting agent must be used. If the supply be insufficient we may, and often do, have deodorisation, but not a true disinfection. For, unfortunately, the most deadly—that is, the organised portions of the noxious matters to be dealt with—are not those which are most easily attacked. The foul-smelling gases and vapours formed during putrefaction or exhaled from animal exuvie are destroyed before the organised matter; as an insect or a bird would be unharmed by the presence of a quantity of chlorine or nitrous acid in the atmosphere, which would instantly destroy or combine with such compounds as sulphuretted hydrogen or ammonia. This is the difficulty which we have so often dwelt upon in regard to water. When sewage is discharged into a river, the organic matter is gradually oxidised at the expense of the dissolved oxygen of the water; but even when the whole of the lifeless organic matter is destroyed in this way, we lack security that the organised or living matter has likewise been destroyed, and this is just the portion that we fear. The disinfectant in this case is oxygen, and we see that its perfect action depends on two conditions—on quantity, namely, and time.

Another great difficulty in the selection and use of disinfecting agents arises from the various circumstances under which they have to be applied. The physician is called upon to disinfect air, water, houses, ships, and clothes, and in every one of these cases the conditions may vary considerably. The offensive cause may be for the time irremovable, as during the progress of an infectious fever. Very commonly the operations have to be carried on in the presence of patients and friends, who must not be poisoned. The disinfection of the floor of a house into which sewer gases find entrance is a very different thing from the disinfection of a house after scarlet fever, and the disinfection of a cesspool or foul pond is different from either. Dr. Angus Smith, with his usual penetration, has drawn attention to the great variations that are produced in the action of disinfectants by the presence of considerable quantities of water, and other similar modifying influences might be mentioned. These considerations are familiar to all who have studied sanitary science, and serve to remind us of the vast difference between mere theoretical knowledge and the practical skill which comes of common sense informed by study and trained by practice.

We now pass to an account of the chief chemical agents which can be made available for purposes of disinfection, selecting those only which have, or claim to have, practical value and importance.

1. *Chlorine.*—This agent deserves the first mention, on account of its extensive use, and great value under certain circumstances. As before said, it is a disinfectant, and it acts either by removing hydrogen from organic compounds, or by promoting oxidation by withdrawing the hydrogen from water. It is commonly used in the form of chloride of lime, a compound which readily yields chlorine when treated with strong acids, and which slowly yields hypochlorous acid, an agent still more powerful than chlorine, when exposed to the carbonic acid of the air. Nevertheless it has been distinctly proved that the value of chloride of lime, and even of free chlorine, has been greatly over-rated. It is true that very small quantities of chlorine will deodorise, but a good deal is required for the destruction of organic life. The common practice of placing saucers with chloride of lime in bedrooms, closets, &c., is not only useless but dangerous, as tending to induce a false confidence, and even when a faint chlorous smell is produced by the addition of hydrochloric acid to chloride of lime, or peroxide of manganese, or by the immersion of crystals of chlorate of potash in hydrochloric acid (all of which processes have been recommended), the result is equally ineffective. The only true use for chlorine in disinfection is for the disinfection of houses, clothing, and bedding after disease. For this purpose the rooms must be closed up, and the chlorine generated in such quantity as to prevent the possibility of human beings entering for many hours. The following is the formula given by M. Regnault, and used in Paris after the siege for the disinfection of linen and bedding. We give English weights and measures approximating to the originals. One pound of chloride of lime sewn up loosely in a strong canvas bag is immersed in a mixture of a pint and a half of common hydrochloric acid, with four pints and a half of water. The room is then closed, and the goods exposed to the gas for twenty-four hours, after which the room is ventilated for forty-eight hours. Everything may then be considered safe. The action of chlorine on delicate metal work and coloured fabrics must of course be borne in mind.

2. *Nitrous fumes.*—The brown fumes of peroxide of nitrogen, produced by the action of nitric acid on copper in the presence of air, were found by a recent special commission of the French Academy of Sciences to be more powerful than chlorine as a destructive disinfectant. For a room of 1000 to 1500 cubic feet the following are the proportions recommended. Water, half a gallon; ordinary nitric acid, three pounds and a half; copper, three-quarters of a pound; the whole in a two-gallon earthenware pan. Doors, windows, and the fireplace must be carefully closed with gummed paper, and extreme care used in entering the room, as the fumes are most deadly. The commissioners, however, go on to say that carbolic acid, which is far less expensive and noxious, and more convenient, is, when properly used, equally efficacious.

3. *Ozone.*—Although oxygen is Nature's great disinfectant, its operation is too slow to render it available for the purposes of our present study. The condensed and peculiarly active form of oxygen known as ozone, has, however, long been known to be a rapid and energetic disinfectant of the destructive kind. But ozone was, until lately, only to be procured in small quantities, and by inconvenient or expensive methods. The invention of Siemens' tube with the modifications which it has since undergone, renders it possible, at the present time, to procure considerable volumes of ozone at comparatively moderate cost. The question has therefore arisen in many minds whether this agent may not now be utilised for purposes of disinfection. Without pretending to dogmatise on the subject, we venture to think that any such application on the large scale is at present improbable. The cost of producing ozone would still be considerable; it would be useless except in very considerable quantity. In a concentrated state it is extremely disagreeable and irritating, and we are not aware that it possesses any great advantage over less expensive and more convenient agents. We should not have included it in this survey but for the prevalence of loose talk about it; talk which is calculated to foster extravagant ideas of its value.

4. *Sulphurous acid.*—Hitherto we have considered only gaseous disinfectants proper—that is, of the destructive kind. We now come to a gaseous antiseptic, very powerful in its action, cheap, and easy to apply, but requiring, like the preceding gases, great care in its use. For purposes of fumigation we are inclined to think it superior to all other agents, except perhaps the tar acids, with which, however, it may be associated. In the excellent researches of Mr.

Crookes on the use of disinfectants in preventing the spread of the cattle plague (*Chemical News*, 1866, vol. xiii.), the greatest advantage was obtained by the conjoint use of sulphurous and carbolic acids (the former obtained by the burning of sulphur), and it was a point of special interest in the experiments that marked advantage was obtained by the use of the gas in quantities too small to be prejudicial to men or animals. It would appear from this that an antiseptic may do good in small quantities, when a disinfectant, under the same conditions, would be worthless—a result confirmed by many observations on the action of the tar acids.

For sulphur fumigation, when human beings and other animals are excluded, we are advised to burn 4 oz. of sulphur to every 100 cubic feet of space. This quantity is probably unnecessarily large, and it would be rather difficult to keep the sulphur from going out. It might, of course, be heated over a chauffer, or made up into torches, which last we should think a plan well worth trying.

Some of the sulphites, notably those of soda and lime, are used as antiseptics; but for purposes of disinfection they do not appear to be very valuable.

An account of the liquid and solid disinfecting agents we must reserve for another report.

REGULATIONS FOR ENGLAND AND WALES AGAINST IMPORTATION OF CHOLERA.

OUR Local Government have followed the example set by the Irish Local Government Board, and have issued an order with the view of preventing the introduction, by means of the mercantile marine, of cholera into this country. The Board, by virtue of the powers given them by the Local Government Board Act, 1871, rescind so much of the Orders of Council of the 3rd and 5th of August, 1871, as relates to England and Wales, and direct that instead the seventeen regulations, of which the following is an epitome, shall be in force:—

1. Defines the term "ship" to include vessel and boat; the term "officer of Customs" to include any person bearing authority from the Commissioners of Customs; the term "master," the person in charge of the ship, &c., for the time being; "cholera," to include diarrhœa; while "sanitary authority" is to have the definition given to it in the Public Health Act, 1872; "clothing and bedding" to mean that in actual use or worn by the patient at the time of or during the attack; and infected ships are such as have had on board during the voyage or stay in a foreign port in the course of such voyage any case of cholera.

2. Directs that in cases of either infected or suspected arrivals the Customs officer may direct the ship to be moored in such position as he shall think fit.

3. During such detention no person to leave the ship.

4. The officer to immediately notify such detention to the port sanitary authority, if there is one; if there is not, then to the sanitary authority of the district in which the ship is lying.

5. The detention by the officer of Customs to cease as soon as the ship has been examined by the proper officer; but if on examination the ship prove to be infected, the detention shall continue until it has been moored, as provided for in Article 9, below. And if the examination be delayed for twelve hours after the above notice has been given, the detention to cease.

6. The sanitary authority (port or otherwise) to fix, with the approval of the chief officer of Customs, some place or places in which ships under detention are to be moored.

7. Any ship arriving within the district of a sanitary authority, whether examined by the Customs officer or not, may be examined by the officer appointed to execute the order, if he suspects the ship to be infected or to come from an infected port.

8. The sanitary authority immediately on receipt of the notice provided for in Article 4, shall cause the ship in question to be examined by their medical officer of health, or by some other medical practitioner, for the purpose of ascertaining whether it is infected.

9. Infected ships to be moored as directed by the sanitary authority.

10. No person to leave an infected ship prior to medical examination.

11. The sanitary authority to cause, as soon as practicable, all persons on board an infected ship to be medically examined, and all persons not certified to be infected to be allowed to land immediately.

12. Infected persons to be dealt with in accordance with the rules, if any have been made, under the 29th section of the Sanitary Act, 1866, or, if none have been made, to be removed, if their state permit, to a hospital or place specially provided by the authority; and no such person to leave such hospital or place until medically certified as being free from the disease. If an infected person cannot be removed from the ship, he is to remain subject to the control of the medical officer of health or other medical practitioner appointed by the sanitary authority, and not to leave the ship without written medical consent.

13. The medical officer of health or practitioner to give all necessary directions, and to take such steps as he may think fit for preventing the spread of infection; and the master is to comply therewith.

14. Any person medically certified to be suspected of being infected with cholera may be detained either on board or in a hospital, or some other previously appointed place, for any period not exceeding two days, for purposes of observation. Any such person certified to be infected to be dealt with in the manner already provided for infected persons.

15. In case of a cholera-death on board a ship in detention, the master is to cause the body to be taken out to sea and so buried as to prevent it rising.

16. The master of a ship is to cause the bedding and clothing of every person who has suffered from cholera on board to be disinfected, or, if necessary, destroyed; but if the master has neglected to do this before the ship arrives in port, he shall forthwith, or upon the requirement of the sanitary authority, cause the same to be disinfected or destroyed, as may be requisite; and the authority, in case of neglect, is to do what is necessary.

17. The master is to cause every part of the ship, and every article therein, other than those last described, which may probably be infected with cholera, to be disinfected or destroyed, when required to do so by the said authority or by their medical officer of health.

We can easily understand that the sanitary authority might direct the destruction of articles of clothing and bedding and such like, because under the 51st section of the Public Health Act, 1872, they are empowered to pay for things thus dealt with; but we do not know what steps would be taken should a sanitary authority or a medical officer of health direct "every part of a ship which may *probably* be infected with cholera" to be destroyed—a power which the Local Government Board has given by their order—and the master refuse to obey the order. We are bound to believe that, in a formal document like this order of the Local Government Board, there has not been any mistake, and as there certainly has not been any precipitancy in the matter, we can only assume that the Board are legally enabled to give to sanitary authorities a power which may prove so disastrous to shipping property. However, as we are rather sceptical on the point, perhaps the Local Government Board will consult one of their numerous legal staff, and give us the benefit of the result. This is a matter of some moment, as we are not aware that a local authority can compensate for the destruction of parts of ships, in compliance with directions given under the order in question; especially as we are gently reminded by a notice at the foot of the order that any person wilfully neglecting or refusing to obey or carry out, or obstructing the execution of, any rule, order, or regulation made by the Local Government Board under section 52 of the Sanitary Act, 1866, is guilty of an offence punishable on summary conviction, and liable to a penalty of £50. It behoves masters of ships to be very circumspect. Perhaps one of the many ship-owners in the House of Commons will "interpolate" Mr. Stansfeld on this point.

A NEW naval hospital was established at Mount Shadwell, Hong Kong, on the 29th of May last.

THE LANCET.

LONDON: SATURDAY, JULY 26, 1873.

A MEETING of medical men of the city and neighbourhood of Manchester has been held to consider the proposal to establish Provident Dispensaries in Manchester and Salford. And the meeting has passed a series of resolutions condemning the proposal. The resolutions will be found entire in another column. The general drift of the objections to Provident Dispensaries may be stated in a few lines. It is averred that the institution of Provident Dispensaries would (1) not remove existing evils; would (2) tend to bring the great majority of the working classes under "one vast system of medical and surgical relief," which would compete unfairly with, and be ruinous to, the best interests of medical men; and that the system thus created would be more liable to abuse "than the present generally-admitted abused hospital charities are." (3) That as regards the conduct of the medical profession to the poor there is no need for the institution of Provident Dispensaries, since consideration is already shown by medical men to the poor, in low charges, in taking payment by instalments, &c. A committee, it will be seen, was appointed to watch and report on any scheme which may be presented.

This is certainly the most formal and the most formidable opposition that has yet been made to the provident system. But its exact force is not easy to gauge. Roughly speaking, there are in Manchester and Salford 277 medical practitioners, or 1 to about 1900 of population. Eighty-three of the 277 signed the attendance-sheet of this meeting; but, on the chairman ruling that reporters were not to be present, seven gentlemen left the meeting. Clearly more than two-thirds of the profession were not present at the meeting, though doubtless the presence of eighty gentlemen shows considerable interest on the part of the profession.

The resolutions passed were unfavourable to the movement; but it is deeply to be regretted that we have no report of the numbers for and against, and no report of the arguments used. We cannot think that, in this respect, the meeting was well advised. The profession is deeply interested in the question of Provident Dispensaries. But the question is a public one, at least too public a one to be fitly discussed with closed doors. The resolutions may have been passed by large majorities, and supported by powerful arguments; but there is nothing to prevent outsiders from supposing that they were passed by only small majorities, and supported by very questionable reasoning. Be this as it may, the profession should have no secrets; and it would have consulted its own dignity and shown more respect to the public by discussing this great question openly and in the light of day. A cause that requires closed doors is presumably not a great one. There is far more to be said on both sides of this question than has yet appeared. Perhaps it was said at this meeting; but we are in the dark, and the opponents of the provident system have paid themselves the poor compliment of acting as if their arguments would not bear publicity, and as if the medical profession was a mere trade union. Further, we must regret that the promoters of this opposition did not wait till some definite scheme was put forward by the committee appointed at the late meeting. They have shown a disposition to condemn beforehand, which must derogate from the respect paid to their criticism when the scheme is produced.

The strength of this opposition consists in the argument that there is already an extensive club system, which admits of indefinite extension, which preserves intact—too much so according to some—the independence of the poor, which leaves medical men free to act as they please in their relations with the working classes, which excites no jealousy in the profession, and which, it must be admitted, has worked fairly well to the extent to which it has been practised. The weakness of the club system is, that it gives the members little choice, provides no consultation in an urgent case, and has no extraneous assistance. We shall not be accused of any partiality in this matter—at any rate, on the side of Provident Dispensaries. But we would remind our somewhat hasty friends at Manchester that the question is not to be disposed of by abstract and rather vague resolutions passed in close meetings. The demand for more perfect medical arrangements for the working classes comes both from themselves and from a large and wealthy section of the community, who see in sickness, as it affects the poor man and his family, a very hard and pitiable case, which they will not be hindered from helping. This demand cannot be set aside without experiment and attempts at something higher. There is another fact which should make the advocates of a club system more willing to give Provident Dispensaries a fair trial—viz., that there are many indications of dissatisfaction among working men with the old small club system, and of a disposition to unite all the clubs and societies of a town together for medical purposes, to be attended by one man, generally a stranger, and often badly paid. A well-worked Provident Dispensary is in every way more respectable and more desirable than this arrangement; and it looks very much as if in the large towns the profession will have to choose between these two systems.

AT a recent meeting of the South Wales branch of the British Medical Association, Mr. T. J. DYKE, of Merthyr Tydvil, the president, gave an eulogistic address on the measures which had been adopted in Wales for the initiation of the Public Health Act of 1872; especially he expressed his admiration of the "policy" of the President of the Local Government Board exhibited in this initiation. "Animated, as Mr. STANSFELD has shown himself to be," Mr. DYKE said, "by thorough intention and purpose that local authorities, whether parish, or town, or county, shall themselves take care of the health of the people resident within their confines, it would have been distinctly opposed to every action of this most distinguished and liberal

Minister if he had not taken care that this axiom of his public life was fully and faithfully displayed."

It is not difficult to understand from Mr. DYKE's address the influences which have operated in his mind in bringing about this enthusiastic admiration of Mr. STANSFELD's policy. He tells us in effect how the initiatory measures of this policy in Wales were carried out after due consultation with local members of the profession, and how the recent proposition for appointing there "supervising medical officers of health" for large districts was a graceful concession on the part of Mr. STANSFELD to the opinions of the profession. We are to understand, in fact, according to Mr. DYKE, that the course pursued by Mr. DOYLE in Wales, under the authorisation of the Local Government Board, was not taken without due consultation with, and the concurrence of, the medical profession there; and that, as Mr. DOYLE would have us believe, the latest step of this course is taken at the suggestion of the profession.

It is impossible not to admire the astuteness which Mr. DOYLE has displayed in inducing the medical profession in South Wales to believe that they have exercised any important influence in determining the course of Mr. STANSFELD's policy in that part of the kingdom. Mr. DYKE has failed to see that Mr. DOYLE's anxiety to show this has a somewhat wider bearing than he has supposed, and that this version of the measures taken to initiate the Public Health Act of 1872 in Wales is not to be received by the profession at large without some different evidence than Mr. DYKE has brought forward; in fact, on the face of it, the profession is simply being made the stalking-horse under which the "policy" of the Local Government Board is being carried out. Is Mr. DYKE prepared to accept, for himself and his brethren, the responsibility for the mischievous consequences which are following upon the measures hitherto adopted in Wales? And yet this is what follows from the position which Mr. DYKE has taken, and which it may be held Mr. DOYLE intends should follow. "Would it not be well," observes Mr. DYKE, arguing in favour of supervising medical officers of health, "to hear first of the best mode of dealing with nuisances ere authorities proceed to order the removal of them? For example, in a certain district, at one of the earliest meetings of the board, 300 owners of houses were ordered by the board to build as many cesspool-privies. Further consideration would have demonstrated the practicability of using another method which would not have been open to so grave an objection as in thus creating 300 mere sources of infection. In another case, the author of the report calmly advises his board to construct drains from privies, so that all matters may flow into the neighbouring watercourses. These examples may serve to show the need of instruction both of officers and boards; and this instruction could be given by a health officer, whose duties would necessarily be clearly and distinctly defined by the appointing authority, and confirmed by the Local Government Board."

Is the profession now to be made, even indirectly, responsible for a "policy" which renders possible results such as these, and which has been deliberately carried out in defiance of previous experience and of the protests of the profession, as represented by its journals and by the Association of which Mr. DYKE is a member? What is there in common between the district medical officers appointed promiscuously, as in Wales, as medical officers of health, irrespective of the nature of their districts and the duties they would have to perform, and Mr. DYKE's proposition, made before the Public Health Act of 1872 was passed, of these officers acting as local helpers in an organised county administration? What is there in common between the "supervising medical officers," now proposed to be appointed by a delegation from the sanitary authorities, and a chief medical officer as appointed by a county authority? Does Mr. DYKE really believe that a "supervising medical officer," appointed by a delegation of the authorities concerned in his action will be to any sensible extent freer from local influence than the district medical officers acting as medical officers of health?

As to these supervising medical officers, Mr. DOYLE (whose address to the sanitary authorities of three counties, in conference at Carmarthen, is, happily for those who seek knowledge, printed in the same number of the *Welshman* which contains Mr. DYKE's address) tells the unvarnished truth when he says that "he is simply following out what has been done elsewhere." Precisely so. So far as the Local Government Board is concerned, it is a question of bringing the differing advice of different inspectors and of the Board itself into some decent show of consistency. The first attempt at harmonising discordancies is to be made in Mr. DOYLE's district, and we see how astutely he has set about his work. Other inspectors will presently follow. For the appointment of district medical officers in Wales as medical officers of health has to be harmonised with the refusal of the Local Government Board to appoint these officers elsewhere. The appointment of inspectors of nuisances for large districts has to be harmonised with the expressed opinion of Mr. STANSFELD, that the Public Health Act imposes upon sanitary authorities "the duty of a minute inspection of nuisances, or a minute inspection of premises in order to prevent nuisances," where, in Mr. STANSFELD's mind, "arose its great future work." The appointments of medical officers of health everywhere under the Public Health Act of 1872 have to be harmonised as to area and population with the duties which they have to perform. In fact, there have to be harmonised throughout the kingdom the incongruities of a "policy" as to organisation which ignored all previous experience on the subject, and which was entrusted to inspectors who had no previous knowledge of the matter. Even that professed policy of local self-government which Mr. DYKE so much admires has to be harmonised with the expressed opinions of the representatives of the Local Government Board. Let us hear what Mr. DOYLE says of this policy, in the address already referred to, with regard to the subject which formed the central point of Mr. DYKE's address. The sanitary authorities were advised to combine to elect a supervising medical officer; and, as an inducement, they were significantly told that "the Local Government Board would hardly continue to pay half the salaries of the local medical officers as officers of health, because they could not feel satisfied that under such auspices the duties would be properly discharged, and they would not be justified in dribbling away the parliamentary part by doling it out in

small sums." Then, again, they were told that "unless the arrangement of the districts was found perfectly satisfactory"—that is, satisfactory to Mr. DOYLE we presume, for "satisfactoriness" of organisation is obviously a very different thing in different parts of the kingdom—"the Local Government Board would not continue to pay half the salaries of the officers of health." Then, as to the officer himself Mr. DOYLE said that "he would be the servant of the local authorities, not the servant of the Local Government Board, who would have no more to say to him *than they had at present to the medical officers of unions*"—no more than this, that his position would not be worse than that of the very scape-goats of circumlocutionalism, central and local! Then, as to this officer's duties, the authorities themselves would define them, but within the limits of the regulations issued by the Local Government Board, and subject to the Board's approval. This is the seventh heaven of local self-government for health purposes which Mr. DYKE admires, and in which the sanitary authority and its officers will have the freedom of a bird in a cage. In fact, that happy local self-government of which he speaks is conditional, and then only partially, on the sanitary authority paying its own expenses.

The Local Government Board is unable to deal with the sanitary administration of the kingdom except with the aid of medical men, but its "policy" is to obtain that aid under conditions which would fetter the medical officer in the same irritating manner as the medical officer under the Poor Laws is fettered. It would subject him in technical matters to lay and consequently amateur inspection, and limit his efforts by rules framed, not upon the objects of his office, but upon departmental requirements rendered necessary by *dilettante* supervision. Hitherto the "policy" of the Board has been to ignore the profession. It has practically set aside its own Medical Department, and brought to an abrupt end the work which has made English official hygiene the type of thorough public-health work, and has thus taken away the great object of and stimulus to ambition among the sanitary medical workers. It now seeks to conciliate the profession by instituting local medical appointments with an appearance of being well paid, but under conditions which make thoroughness of work impossible. It will remain for the profession to say whether it will accept passively an interpretation of a great legislative measure which, while it would make them responsible for results, would substitute for a trusted, technical, and helpful supervision, such as the Royal Sanitary Commission contemplated, the supervision of lay inspectors, with, at best, a *dilettante* knowledge of the subject-matters of the medical officer of health's duties.

WE have received a copy of the Report of the Building Sub-committee of St. Thomas's Hospital, presented to, and approved by, a General Court of the Governors of that institution on the 16th inst. The Report is a lengthy document, and sets forth the various items of expenditure incurred in the construction and equipment of a hospital which, as far as the magnitude and design of the undertaking are concerned, forms a striking monument of that Christian enterprise no counterpart of which ever existed in the most enlightened and polished pagan cities of antiquity.

The Report of the Sub-committee first details the steps taken by the authority of the General Court of Governors with a view of selecting an appropriate site and of procuring designs for the erection of the new hospital. Seventy-seven sites were offered or suggested; out of which six of the most eligible were specially reported on, and, ultimately, that on the southern bank of the Thames was chosen. Plans and designs for the new hospital having been submitted by Mr. H. CURREY, the architect of the hospital, and approved by the General Court, operations were commenced by Mr. PERRY, whose tender was accepted from that of twenty building firms, in the latter part of 1867; and on the 13th of May, 1868, the first stone of the new hospital was laid by Her Majesty the QUEEN.

The cost of the institution, it must be confessed, has been enormous. The site is that of the Albert Embankment and some land in its immediate vicinity; the cost of which, with the necessary extensive concrete and brick foundations required by the exceptional character of the ground (half of the site having been reclaimed from the river), represents a sum of £148,545. The total cost of the building is £383,948; that of the furniture upwards of £10,000: the total outlay being upwards of £552,000. The architect states that out of the cost of the building (£383,948) about £30,000 may be taken as the cost of the museum and school buildings, including fittings; £10,000 as the expense of erecting the home for the probationer nurses; and £33,000 as the estimated cost of the extensive range of buildings required for the out-patients and casualty departments. This leaves £311,000 as the cost of the hospital, including the administration block, officers' residences, the chapel, the enclosure walls and railings, the river colonnades, hydraulic lifts, and all necessary fittings; and as the hospital is designed for nearly 600 beds, the cost per bed is a little more than £530, with a cubic capacity of 1800 feet for each patient. The cost per cubic foot of the whole range of buildings has been about 9*d*.

The sub-committee select three hospitals for the purpose of instituting a comparison of the cost of St. Thomas's with that of other institutions of a similar character. The Herbert Hospital—which is, to our mind, one of the best constructed pavilion hospitals in Europe,—with a cubic capacity of 1200 feet per head, cost £320 per bed; exceptional circumstances, as at St. Thomas's, having increased its expense. The Lariboisière Hospital at Paris, with 606 beds, and a cubic capacity of nearly 1900 feet per patient, is said to have cost £440 per bed; and the expense of the Hôtel Dieu at Paris, now in course of erection, with a cubic capacity of 2300 feet per head, is reported to be £750 per bed if intended for 800, or as much as £1500 per bed if the number of these be reduced, as proposed, by half—namely, 400. Taking, therefore, the average cost of these three great hospitals, the average cost per bed will be a little over £500, and the average cubic capacity 1800 feet; which figures, the report of the sub-committee states, nearly correspond with the results of St. Thomas's. The accommodation provided at the latter hospital in ward offices &c., irrespective of the actual ward *space*, is believed by the sub-committee to be far larger than at any of the other hospitals referred to, and, as they contend, this is included

in the cost per bed. In passing, we may remark that we regard the unnecessary multiplication of these ward offices as a defect rather than otherwise. We should state that the architect gives as the cost of one pavilion at St. Thomas's, containing 111 beds, with sisters' room, nurses' dormitories, ward kitchen and offices, excluding the cost of special concrete foundations, as nearly £280 per bed, or £318 per bed, inclusive of fittings, lights, gas, warming and ventilating arrangements, &c.

We have no desire to approach the consideration of the construction and general arrangements of St. Thomas's Hospital in a carping or hypercritical spirit. The hospital is a magnificent one, but for some reason or other, which we do not now stop to investigate, it has not been exempt from its share of affections which are attributed, rightly or wrongly, to defective construction or arrangement of hospital detail. This subject of hospitals is one of enormous importance. It involves vast financial considerations, which should never be lost sight of in the case of charitable institutions, where large sums of money are held in trust for the succour and benefit of the sick and maimed; and it likewise possesses this element of danger, that the errors of principle, design, or detail embodied in one hospital are too often copied in others at future times and in other places. St. Thomas's Hospital, probably, has sins to answer for besides its own in this respect; for its construction has been regarded by some architects in this country and abroad as a model that might be confidently copied, and its arrangements as a pattern that be safely followed.

The original cost of the hospital, compared with its working power, is very large; and its warming, lighting, and efficient administration must entail a continuous drain on its resources. The institution is nominally constructed for 600 beds, but with the portion set aside for contagious diseases—which, happily, has been nearly always empty—and the utilisation of a ward for linen, the hospital may perhaps be more accurately and practically regarded as equal to about 500 beds. It must be remembered, too, that the cost per bed has been obtained by deducting the cost of the site and foundations from the estimate.

We do not think that it would be difficult to discover many points that might be regarded as of questionable utility in the design and arrangements of this hospital. In the first place, exception might justly be taken, on sanitary grounds, to its site. The number of stories superimposed upon one another in the separate pavilions, and the insufficient distance between the different blocks; the unnecessary size and multiplicity of the various offices, theatres, and rooms, increasing the cost and diminishing the simplicity and safety of construction of the building as a hospital; the questionable nature—for we are not warranted in saying more—of the ventilating arrangements; the very expensive character of the administrative portions of the building, and the extensive system of intercommunication between the different blocks and portions of the building,—all present so many points for consideration and criticism. But the subject is one which opens up so much for our contemplation in regard to what is the best hospital construction and arrangement to be adopted for the future in the case of institutions intended for the reception of medical and surgical cases, with an out-patient department and medical school in connexion therewith, that we must content ourselves this week by simply indicating a line of inquiry on which we purpose entering more fully hereafter.

THE best criterion of the success of our numerous metropolitan and provincial medical schools is, doubtless, to be found in the position in the profession which their respective pupils take in after-life. This is, however, a long-deferred judgment; and a more ready, though perhaps rougher, estimate of the success of each school may be formed from the returns published in our columns last week, showing the number of candidates and percentages of rejections at the College of Surgeons' examinations during the past year.

It is a little remarkable that the number of candidates for the anatomical or primary examination should be so much larger than that of the candidates for the diploma—viz., 702 of the former to 461 of the latter; but doubtless—putting aside those rejected ones who never make another effort—a considerable number of students never qualify, being induced by various reasons to turn to other pursuits. The proportion of rejections for the primary examination is, as might be anticipated, larger than for the second examination, being 28 per cent. as compared with 18 per cent.; but this is higher than, in our opinion, the rate ought to be were the students properly prepared by their teachers for the tests to be applied to them. In large schools, which send up some hundred or so pupils, it may be impossible to see that every man presenting himself is justified in doing so; and it says something for the anatomical and physiological teaching at Guy's that, with a larger number of pupils than either University College or St. Bartholomew's, its rate of "plucks" was considerably lower than either. How, then, can we explain the anomaly that, for the pass-examination, University beats both the great hospitals hollow? If Guy's and St. Bartholomew's men are not *practical*, they are nothing; but whose fault is it that 20 and 15 per cent. of their pupils were plucked? Charing-cross has the unenviable notoriety of having the highest percentage of failures of all the London schools at both examinations, and St. George's comes next. Of the provincial schools which sent up any number of pupils, Birmingham and Leeds alone can be complimented on their surgical success, the former having only 1 pluck out of 19 candidates, and the other 1 out of 14½; but this good score is more than counterbalanced by the anatomical failures at Leeds, amounting to not less than 40 per cent. When Manchester has a still higher percentage, Liverpool 31, Birmingham 29, and Bristol 37 per cent. rejected at the first examination, we cannot but think the recently carried motion to inspect the various medical schools was not brought forward too soon. That large hospitals do not necessarily turn out good surgical pupils is shown in the provinces as well as in London; for the percentage of plucks at the pass-examination was at Manchester 25, at Liverpool 35, at Bristol 18, at Newcastle 40, and at Sheffield 25. The numbers of candidates from the Scotch and Irish schools were too small to form any basis for a fair estimate of the teaching at those places.

Medical Annotations.

"Ne quid nimis."

HOSPITAL SUNDAY.

THE Council of the Hospital Sunday for 1873 terminated its labours at a meeting at the Mansion House on Wednesday, July 23rd. The Lord Mayor was in the chair. The sum reported to have been received up to the morning of the 23rd was £27,400. This sum may not realise the expectations of all who have speculated on the probable result of the movement in 1873. It is doubtless disproportionate both to the wealth of the metropolis and the need of the institutions whose benefit is contemplated, and, we might add, to the great trouble and influence which have been exerted in favour of the movement. But when it is considered that this is only the first attempt at a Hospital Sunday in London, and that the day for the collection was, almost unavoidably, not fixed till the arrangements of the churches for the year had all been made, the result will be regarded as a success—we might say a great success—promising a very brilliant result next year and in succeeding years.

The most important part of the proceedings of Wednesday was the reading of the list of contributions to the hospitals, dispensaries, &c., awarded by the Committee of Distribution. Seldom have men had a more difficult or invidious duty to perform than the Committee in question, in distributing £27,000 amongst 126 institutions, each of which has its own admiring friends, who think it the most admirable and deserving charity, but which, weighed in the severe scales of the Committee of Distribution, may appear worthy of only a small contribution from the hospital fund. The Committee will be judged generously for one year at least, yet it is clear that, as the fund depends mainly upon the public, and more particularly the church-going public, it must either be distributed on principles intelligible to it, or suffer for want of its support.

The institutions to which awards have been made are 126 in number—viz., hospitals 64, dispensaries 47, other institutions 15. The hospitals are to receive £24,571 13*s.* 4*d.*, the dispensaries £967 18*s.* 4*d.*, other institutions £881 13*s.* 4*d.*, or as much more in proportion as the completed sum will yield. The grants to the particular hospitals will be found in another column. The sums awarded to hospitals vary from £3833 6*s.* 8*d.* to the London Hospital to £19 3*s.* 4*d.* to the Hospital for Hip Diseases in Children. The sum awarded to dispensaries is both small and monotonous, varying from £76 to the City Dispensary to £9 11*s.* 8*d.* to several dispensaries. The average sum awarded to hospitals is £383, that to dispensaries £20.

The part of this award which will be most disappointing to the public is the treatment of dispensaries. They may not be such imposing institutions as hospitals, but they do a great deal of work, and have been largely supported by churches and chapels. Dispensaries cannot expect the churches to give collections both to the Hospital Sunday Fund and to local charities, and yet, if every year dispensaries are to be treated as lightly as this year, they will be great losers by the Hospital Sunday. Dr. Glover's illustration of this point is forcible. He is connected with the Holloway and North Islington Dispensary, which has received during the last four years an average annual sum of £200 from neighbouring churches. The sum awarded this institution by the Committee of Distribution is £38 6*s.* 8*d.* Such a result must certainly be disappointing to both the dispensary and the churches who have thought it worthy of their support. Canon Miller gave a similar illustration from the case of the Royal Kent Dispensary; but the Lord Mayor, who seemed to have the case of every hospital and dispensary at his fingers'-ends, showed that this particular dispensary was investing goodly sums of money, and, therefore, was not needy. There are other parts of the award which are open to criticism, but we must revert to the subject again.

The movement, thanks largely to the Lord Mayor, has had a brilliant beginning, and any criticism to which the action of the Committee of Distribution may be subjected will, we trust, only have the effect of making the result next year more satisfactory.

THE BISHOP OF WINCHESTER.

A CAREER of great energy and much usefulness has been prematurely cut short by the deplorable accident which befel the Bishop of Winchester on Saturday. As a publicist, the late prelate had claims on nearly every professional class; but, next to the Church, on none more than on the medical. As Lord High Almoner to the Queen, an office to which he was appointed in 1847, he was necessarily brought much in contact with the great question of public charity and its distribution, and few men came to have more enlightened ideas on the subject whether as a whole or in detail. His voice, and all the world knows how suasive *that* could be, was ever at the service of charitable undertakings, sanitary, social, and medical; while his presidency on such occasions as the Literary Fund dinner, or the distribution of prizes at this or that educational institution, was always made memorable by the consummate tact with which he pressed every interest into subservience to the matters of the hour. His was a life not uncommon in England—a life which directly contradicts the popular assertion that active and multifarious brain-work inevitably issues in premature decay of the physical and moral powers. The late prelate, indeed, was never in more vigorous condition, mentally or bodily, than at the very time when his sun went down while it was yet day.

As to the immediate cause of the terribly sudden death of the venerable prelate, there can be little doubt. The Bishop seems to have fallen (and a man of his massive build must have fallen with great force) on his head, thereby bending it upon his chest, and causing his body to turn a complete somersault. The nature of the accident would certainly be likely to cause dislocation of the upper cervical vertebræ, with consequent compression of the medulla, and the fact that death followed instantaneously leaves no room to doubt that the fatal lesion would be found as we have indicated. With the exception of aortic disease (from which there is no evidence that the deceased suffered) there is no other lesion which (as far as we know) is capable of instantaneously extinguishing every sign of life.

THE HEAT.

ENGLISH people bear the heat of exceptionally hot weather with very little equanimity. It must be a subject of wonder to a foreigner how we manage to retain our hold of India, and how people exhibiting such an aversion to high temperatures as the English can ever be tempted to reside in that country? No doubt London streets and underground railways are stifling places with the thermometer above 80°; but high temperatures are so rarely continuous, and a breeze so frequently springs up towards evening, that we can form but little idea of the physical depression and discomfort our countrymen undergo during a hot season in India, or even of the suffering and loss of life which great solar heat so often entails on the inhabitants of New York and other large American cities. The effects of heat, from

a medical point of view, are worthy of a little consideration. Thermic fever may be said to represent a chain of morbid phenomena, the gravity of which ranges from a short sharp attack of feverishness, attended with a dry and heated skin, headache, pain in the eyeballs and thirst, to a condition in which the blood is so superheated as to render it unfit for nourishing the nerve centres at all; and the affected individual becomes insensible, and the action of his organs of respiration and circulation is suddenly impaired or paralysed. On infants and children the effects of heat are chiefly noticeable in producing an increased susceptibility of the organs of digestion to diseases such as colic, diarrhœa, and English cholera. In sunstroke, properly so-called, as well as in heat apoplexy, there is always great surface heat. The skin feels extremely hot and dry, and its temperature rises to 104° or 110°. Dr. Horatio Wood, jun., of Philadelphia, instituted some experiments last year on the synthetical production of the phenomenon of sunstroke. By means of an apparatus, he made hot water circulate round the heads of animals; and he found a brain temperature of 114° was rapidly fatal to cats. Moreover, he showed that the fluid of muscle, or myosin, coagulates between 108° and 115°. There is no doubt that the surface heat, in cases of sunstroke and heat apoplexy, is but an index to the increased blood heat, of which it is a concomitant. And it is a very significant fact, that in the subjects of skin diseases, so frequent in hot climates, these affections often diminish or disappear some time before an attack of heat stroke. This shows very plainly the importance of maintaining the activity of the circulation and functions of the skin. Temperance, in all things, especially in the use of alcoholic stimulants, is one of the most important points to be attended to, besides the use of the bath, light clothing, and the avoidance of a stuffy atmosphere in bedrooms and offices. The liberal use of cold water, and free exposure of the surface to currents of air, are the main things to be done in a case of impending or actual heat apoplexy. And as regards infants and children, proper feeding, a plentiful supply of iced fluids, and well-ventilated bedrooms, are the best safeguards against diarrhœa, as well as the best preservatives of health.

METAMORPHOSIS OF FOOD AND TISSUE IN FLESH AND FAT DIET.

IN the last part of the *Zeitschrift für Biologie* (Band ix., Heft. 1), MM. Pettenkofer and Voit give the results of their continued researches with their famous dog on the metamorphosis of tissue. The present series of experiments was undertaken with a view to determine what becomes of fat ingested into the stomach together with flesh. They furnish numerous tables, which show the effects of dieting with 400 grammes of flesh and 200 of fat—500 and 100, 500 and 200, 800 and 350, 1500 and 30, 1500 and 60, 1500 and 100, and 1500 and 150. They then proceed to state their conclusions. They find that fat is taken up in large quantities from the intestine. During a long experiment, extending over fifty-eight days, in which the animal was fed with 500 grammes of flesh and 200 of fat, 14·7 grammes of dry fæces were evacuated containing 4·6 of fat; so that in every twenty-four hours 195·4 grammes of fat out of every 200 ingested were absorbed. On feeding with 800 grammes of flesh and 350 of fat for four days, 13·4 of dry fæces were expelled with 5·2 of fat; so that, of the 350 grammes of fat, no less than 344·8 grammes were absorbed.

Thus it appears that although with moderate amounts of fat in the food some portion is discharged with the fæces, yet this is not because it cannot be absorbed, since, if larger quantities are given, nearly all is still taken up. An extraordinary amount of fat can be disposed of in the body. It is generally believed that the fat is a respiratory food in opposition to the albuminous compounds, and that in proportion to the amount of oxygen absorbed, owing to depth and frequency of respiration, it becomes oxidised, a process to which the albuminous compounds are less prone, and it is believed that the fat protects the albuminous compounds. But the results obtained in this series of researches are opposed to such views. It would rather appear that fat splits up in the economy into simpler compounds with greater difficulty than albumen, for in one experiment, where 1500 grammes of albumen and quantities varying from 30 to 150 grammes of fat were given, the albumen underwent almost complete disintegration, whilst the fat was wholly stored up in the economy. It may be said, indeed, that the fat (or hydro-carbonaceous compounds) resulting from the decomposition of the albumen is more easily oxidised than the fat of the food, and protects this last when introduced into the organism from the action of oxygen. The quantity of fat which results from the disintegration of albumen may be estimated at 51—55 per cent. —that is, taking the former number, 1500 parts of meat containing 328 of albumen would furnish 168 of fat.

When the organism is poor in fat, the fat ingested as food, or coming from the disintegrated albumen, is easily stored up, or, in other words, less undergoes oxidation. If, on the other hand, much fat be accumulated in the body, there is great indisposition to the deposit of any more. In the former case the fat of the economy is most abundant in the fluids, in the latter in the organs.

The absolute amount of albumen in the body is also of importance in regard to the disintegration of fat, since, where there is a large quantity of cells in general more undergo decomposition.

ST. JOHN'S HOSPITAL.

WITH respect to the letter received from the Vice-Chairman of this hospital, inserted at page 138, we beg to remark that, whatever may be the construction put on a particular sentence, it must be clear to every unprejudiced reader that in all our articles we have endeavoured to show that the advantage of special departments in the general hospitals over special institutions was potential rather than actual, and that we have always advocated the creation of special departments in the large hospitals rather than a dissipation of the public money on the erection of separate buildings, and the maintenance of an expensive staff of lay officials. For instance, if the modest sum that is now asked for a new building for St. John's Hospital were distributed among twelve of the general hospitals in London, we have no hesitation in saying that the amount of good done at each would be infinitely greater than that accomplished by any special institution although possessed of all the fund. We repeat that we object on principle to special hospitals, but are prepared to grant that an exception may possibly exist in the case of one specialty, but that is certainly not dermatology, which is most advantageously studied in the general hospitals. If these special hospitals were productive of good work, scientific and practical, they would then have some claim to our consideration; but it is a notorious fact that they have a reputation the reverse of this, and do not even possess the confidence of the leading practitioners of the subject. We may truly say that the best workers at the subject of dermatology, in London at least, are the gentlemen who are attached to the special departments of the general hospitals; and, although it would be invidious to particularise individuals, the names of several of the most distinguished dermatologists in England must at once be suggested to any

one conversant with the subject. To regard, therefore, the St. John's Hospital and its medical staff as the representatives of modern dermatology in England would be unwarrantable presumption, and an insult to all the disinterested workers at the subject of skin diseases. The hope of making this hospital a tutorial one is false, for students invariably seek instruction only from their teachers at the general hospitals, and are well known to refrain from visiting the special institutions, except perhaps occasionally from curiosity. New fields are only explored when old ones cease to be convenient or profitable; and when a student leaves the hospitals and teaching of this country for the continental schools, it is not because he has exhausted everything here, but that, as his time is limited, he may enlarge his experience to the greatest possible extent by visiting foreign countries, and, by further observations, gain knowledge of new methods of treatment, and examine fresh phases of disease. For there is a national as well as an individual difference in the manifestations of disease, and he who would know all its modifications must examine it under all the varying conditions of race and climate. It is, therefore, not at all disrespectful to the British teachers for students to "finish their education" on the continent, so that we doubt very much whether the erection of even a new St. John's Hospital would deter one man from going to Paris or Vienna.

THE METROPOLITAN ASYLUMS BOARD AND THE HEALTH OF LONDON.

To judge from the different hospital reports presented to the Metropolitan Asylums Board at their meeting on Saturday last, the state of London, as far as relates to infectious diseases, may be described as fairly satisfactory. An outbreak of typhus localised in St. Olave's Union was reported, and it was resolved to call the attention of the sanitary authorities of the union to the matter. At present there are seventy-one cases of fever of various kinds and twenty-eight of small-pox under treatment in the hospitals of the Board collectively. At the same meeting a communication from the Local Government Board was read, which referred to the class of patients sent to the asylum at Hampstead. It appears that bedridden persons and those suffering from senile decay had been sent there, while the central authority wishes that it be only used for the reception of those who could easily be removed in case of the buildings being required for their old purposes. Hampstead, from its proximity to London, compared to Leavesden and Caterham, the other asylums of the Board, appears to us to be the more suitable place for the reception of aged and suffering imbeciles, whereas the removal to a distance of fifteen or twenty miles is attended always with difficulty to the officials, and often with danger to themselves. Surely, if their removal should unfortunately be rendered requisite by the outbreak of an epidemic, it might be accomplished whilst the staff of the hospital was undergoing the necessary reorganisation.

During the late epidemic of small-pox the Metropolitan Asylums Board found that the hospital accommodation at their disposal was inadequate to the reception of the large number of patients suffering from the disease which came under their care. Having in view the possibility of the occurrence at a future time of an epidemic of equal magnitude, the Board resolved, as opportunities offered, to obtain sites at various parts of the metropolis. Upon these, if the necessity arose, they could in a short space of time erect wooden huts or other temporary constructions suitable for hospital purposes. This course of action displays a praiseworthy foresight, and is an admirable one if sufficient care be taken in the selection of the localities. Up to the present time two sites have been secured in addition to those occupied by the hospitals at Stockwell, Homerton, and Hampstead—one at Kensington, the other of nine acres at Hatcham-park, near the Newcross-road. The latter formed the subject of a question put in the House of Commons on Monday evening to the President of the Local Government Board by Mr. Watney. Mr. Stansfeld, in his reply, defended the purchase of the site, on the grounds of its being situated contiguous to a population likely, during the prevalence of epidemic, to require such a hospital, and also as in itself sufficiently isolated.

DR. PARKES'S "MANUAL OF PRACTICAL HYGIENE."

THE publication of the fourth edition of Dr. Parkes's "Manual of Practical Hygiene" is a noteworthy event. This work, previously unrivalled as a text-book for medical officers of the army, in its new form is equally unrivalled as a text-book for civil medical officers of health. The work, indeed, is now precisely what was needed for the assistance and instruction of the numerous sanitary officers now being created throughout the country, and to them it will be simply invaluable. The first book treats in successive chapters of water, air, ventilation, examination of air, food, quality, choice, and cooking of food, beverages, and condiments; soil, habitations, removal of excreta, warming of houses, exercise, clothing, climate, meteorology, individual hygienic management, disposal of the dead, the prevention of some common diseases, disinfection, and statistics. The second book is devoted to the service of the soldier, and is hardly less instructive to the civil medical officer of health than the first book. In view of our volunteer forces, it is in the highest degree desirable that the medical officer of health should make himself familiar with the principles of military hygiene. The need, in short, for a comprehensive and trustworthy text-book of hygiene for the civil medical officer of health, which was beginning to be most keenly felt, is now amply supplied by this admirable book.

THE AIR OF THE TICHBORNE COURT.

THERE appears to have been a good deal of misunderstanding in regard to the ventilation of the law courts of Westminster. Very excellent apparatus for the purpose was contrived more than twenty years ago by Mr. Goldsworthy Gurney, and is still in perfect working order. The system is identical with that used in the Houses of Parliament, and is under the supervision of Dr. Percy, assisted by Mr. William Prim, the resident engineer to the Houses of Parliament.

In Palace Gardens, just opposite St. Margaret's Church, a square tunnel may be seen from the road, which carries air to the Court of Queen's Bench. At the mouth of it a jet throws a fine spray of water over the air which enters, thus cooling the air and saturating it with aqueous vapour. The cold air enters the court through perforated zinc, which is fitted underneath the seats. The upper part of the court communicates with a shaft four feet in diameter, in which a large ring of gas burners produces a powerful upward draught.

It is obvious that the successful working of this system depends on the exclusion of all air that does not enter through the tunnel. Until lately, however, it appears to have been the custom to ignore the ventilating apparatus, and trust to doors and windows, which are utterly insufficient for the purpose.

On Wednesday, after some complaints from the jury, the apparatus was set at work again for the first time during the present trial, and we understand that the result was

very satisfactory. When we last visited the court on Thursday, we found a marked improvement in the atmosphere, and it was pointed out to us that the temperature of the air which was entering the court was 14° below that of the passages.

The engineer is arranging to throw a fine spray of water over the whole of the skylight and leads, and the result will, no doubt, be a great diminution in the temperature.

THE BRITISH MEDICAL ASSOCIATION.

THE British Medical Association, which has of late years considerably increased in numbers, intends to make the metropolis the scene of its annual meeting next month. The meetings of the Association will be held at King's College, Strand, and will be under the presidency of Sir William Fergusson, Bart., F.R.S., who will deliver an inaugural address on Tuesday, August 5th, at 3 P.M. An address in Medicine will be delivered on Wednesday, the 6th, by Dr. Parkes of Netley; an address in Surgery on Thursday, the 7th, by Professor John Wood of King's College; and an address in Physiology by Professor Burdon-Sanderson, on Friday, the 8th. In addition, papers on professional subjects will be read by the members of the Association in the several sections of medicine, surgery, obstetric medicine, public medicine, psychology, and physiology.

The evenings of the days of meeting are fully occupied, Tuesday being devoted to a reception given by the Lord Mayor, Wednesday to a *soirée* given by the College of Surgeons to its Fellows and Members, as well as to the Association; Thursday being fixed for the public dinner of the Association, and Friday for a *soirée* to be given by the Council and Medical Faculty of University College. In addition, we have no doubt that much private hospitality will be exercised by the metropolitan members of the profession, many of whom have, however, been greatly disgusted at a "whip" addressed to them on the subject by a self-constituted "Entertainment Committee."

We trust the Association will have a successful meeting, and that medical science may gain much from its discussions.

UNWHOLESOME FRUIT.

THE *Pall Mall Gazette*, in commenting upon a recent conviction for selling decayed cherries, draws attention to the scope and meaning of the words "unfit for human consumption," and expresses a hope that not only *decayed* fruit will be condemned by the sanitary inspectors, but that *unripe* fruit will meet with a similar fate. This is a most timely piece of advice, and one which we gladly second. The recklessness with which green fruits, especially apples, are hawked about the London streets, should certainly receive a check, for there can be no doubt that, of the two, immaturity is a more common and quite as potent a cause of disease as decay. The deficiency of sugar and the excess of free acid and cellulose in unripe fruit render it irritating and indigestible. It is, from a chemical point of view, nearly valueless as an article of diet, and when taken into the stomach serves merely to cause colic and diarrhœa, and to prevent the assimilation of whatever wholesome food may have been eaten. As to the wastefulness of picking fruit before it is mature, we will say nothing. "Although," says the *Pall Mall*, "there are children, and even grown-up people, who will devour anything in the shape of fruit, even though it may be as hard as a bullet and sour as vinegar, yet it is doubtful whether in these days, when cholera is looming in the distance, it is safe to venture on experiments of this nature."

THE INSUFFICIENT SUPPLY OF FOOD TO YOUNG PEOPLE.

THE *Lyon Médical* of the 16th of March last contains an article from the pen of M. Diday, on a subject of great importance in all countries. The author, well known as an eminent syphilographer, soars, in this article, above his specialty, and proves himself an able and eloquent medical philanthropist. His aim is to show that, in schools and workshops, the system of half feeding youths and young girls who are rapidly developing, and who, above all things, require wholesome and sufficient food, occasional rest, and pure air, lies at the root of numerous ailments, the cause of which is simply insufficiency, and often bad quality, of food.

M. Diday enters into a series of interesting details as regards schools, and shows that, at Lyons at least, there are public schools where boys are actually starved, the effect on their frames being most disastrous. He relates the case of a boy who had obtained flattering distinctions and prizes, whose parents asked him how they could reward him. His answer was, "Buy me a cloak, and give me plenty to eat."

Matters are as bad in factories and workshops, where niggardliness keeps rations so low that, especially with girls, the most lamentable state of health is the consequence. The author attributes much of the inefficiency of many French youths to this cause, and eloquently calls the attention of parents and the authorities to the shocking famishing system prevailing at Lyons.

The hint should be taken in this country, and medical men will do well to inquire into the matter when investigating the cases of young patients who present symptoms the diagnosis of which offers some difficulty. M. Diday deserves considerable credit for his courage, as he is writing in a comparatively small locality where the ire of the accused parties may easily reach him.

THE WIMBLEDON CAMPAIGN.

WHEN a fortnight's campaigning in a climate like ours supplies no occupants for the field hospital, it must be regarded as the exceptional event necessary to prove the usefulness of field hospitals. We are glad to have to record that the health of the Wimbledon Camp has proved such an exception this year; the only patients who required more than a dose or two of astringent mixture or the redoubtable house medicine were a policeman and an aged spectator. The former was attacked with rheumatism on the second day of his encampment, and thereupon returned to London; the latter, an old gentleman who sustained a concussion of the brain through his horse throwing him, was accommodated at the field hospital immediately after the accident, and until his friends took charge of him.

The Canadian camp was doubtless one of the greatest attractions for the public who visited Wimbledon Common during the last fortnight, but we think the hospital would have claimed almost equal attention had its modest "Red Cross" banner been as easily recognised as the Canadians' giant flagstaff.

Drs. Temple and Mayo had charge of the hospital, which was pitched close to the Windmill. It consisted of two regulation hospital marquees of double canvas fitted with a boarded floor and six beds, one for volunteers, the other for regulars. Between these a similar-sized tent, which was designed to serve for consultations, operations, and dispensary; and the medical officers' tents, situated on either side of the entrance.

An ambulance waggon attended the field movements; and we certainly think that the "Red Cross" element was

among the most perfect items of this Volunteer campaign, as we hope it will ever be in any that is conducted by this country.

PORT SANITARY AUTHORITY FOR SUNDERLAND.

AN order has just been issued by the Local Government Board constituting the mayor, aldermen, and burgesses of the Borough of Sunderland (acting by the Council) the sanitary authority, for so much of the Port of Sunderland as lies within the boundaries of the Sunderland Union.

The Port Sanitary Authority has assigned to it, within its jurisdiction, all the powers and duties of a local authority under the Nuisances Removal Acts, 1855, and amending Acts, together with all the powers contained in the Sanitary Act, 1866, in regard of ships, waters, and persons engaged therein, and of the provision of hospital accommodation for the sick, and under the fifty-first section of the Public Health Act, 1872.

The above powers are declared to extend to the waterside of the district constituted by the order, the waters of the river Wear abutting upon it, and to the docks, basins, creeks, &c., running into the river within the district.

The Port Sanitary Authority is further empowered to appoint medical officers of health and inspectors of nuisances.

We believe that this is the first order which has been issued constituting a Port Sanitary Authority.

FOUNDER'S DAY AT EPSOM COLLEGE.

THE annual celebration on the 17th inst. in memory of John Propert has more than usual interest in consequence of the presence of the late Bishop of Winchester, who performed with more than ordinary solemnity confirmation—his last church work—on thirty-two of the pupils, previous to the usual speeches in the school. The Council were represented by Drs. Jonson, Carr, and Hogg, and Messrs. F. Hird, Bransby, and W. Powys. The general company, which was unusually numerous, included the Rev. Dr. Hessey, Professor Key, Miss Propert, and a large assemblage of ladies. The Carmen Gratulatorium Latinum, by Mr. Bannister, was well pronounced in the new or continental style, and contained many brilliant passages; the Greek of Messrs. Sloman, Growse, and Cutfield was warmly applauded; the elocution of Noble, both in Latin and English, deservedly commended; the recitation and acting of the Modern Miracle, from Shakespeare, by a whole troupe, evidenced a complete mastery of the subject, and elicited warm commendation, and from none more than the good Bishop, whose removal from us all now deeply deplore.

THE LIVERPOOL CORONER.

THE office of coroner is certainly often a most thankless one, and one in which zeal is liable to sad misinterpretations. The Lancashire magistrates seem to follow the parsimonious example set them by their brothers of Middlesex, and, by making a fuss about the expenses of inquests, are holding out every inducement to their coroner to neglect his important duties and enjoy peace and quietness. One of the magistrates seems to think that in cases of death from natural causes no inquest can be necessary, quite forgetting, apparently, that prior to the inquiry the real cause of death is always enveloped in more or less obscurity, and that many cases of death by poisoning very closely resemble death from natural causes. These magistrates, who guard the county purse so jealously, would probably be the first to censure the coroner if, from motives of economy, he were to fail in the proper execution of his duties. It should be a matter of congratulation rather than of censure when the cause of a sudden death proves to have been natural. It is to be regretted that coroners are not always paid fixed salaries, or that some means cannot be adopted to put a stop to these oft-recurring complaints, which cannot be made without imputing false or selfish motives to the coroner's zeal—imputations which never fail to disturb the harmonious relations which should exist between gentlemen.

AN EXPERIMENT IN FAVOUR OF PASTEUR.

THE experiment is based on the operation of castrating rams by twisting the cord. Such proceeding is very effectual, and does not interfere with the general health of the animal. Now M. Chauveau, of Lyons, began by injecting into the blood of a ram from four to five grains of the matter obtained from putrid abscesses. This dose is sufficient to impregnate the whole organism, but not strong enough to kill. The first symptoms of septicæmic fever, which generally last from twelve to forty-eight hours, were allowed to pass by, and M. Chauveau then performed the usual twisting operation—viz., within, and not disturbing the scrotum. But the testis, which, by the introduction of the irritating matter, received putrid fluids carried there by the circulation, instead of becoming simply atrophied, was seized with gangrene, turned sloughy, and the animal died. M. Chauveau (whose paper was presented to the Academy of Sciences of Paris by M. Pasteur) considers that the cause of the gangrene lies in the vibriones; for when the same experiment was performed with the *filtrated* septic fluid no gangrene supervened.

It should not, however, be forgotten that Dr. Onimus has made experiments of a negative kind, and denies that any septic power is possessed by the vibriones.

THE CRY OF "WOLF."

LONDON and the provinces were startled on Tuesday by a communication addressed, by Mr. J. Macandrew, M.R.C.S., to *The Times*, announcing a *bonâ fide* case of Asiatic cholera at the East-end. The clerk of the Poplar District Board of Works having ascertained that the deceased had, a few days before, received a kick in the abdomen, found on further inquiry, that Dr. Buchanan, medical officer of the Privy Council, had failed to find the smallest vestige of cholera. At the meeting of the Board, much indignation was naturally felt at the recklessness with which Mr. Macandrew had rushed into print before making a post-mortem examination; while a hope was expressed that the journals, professional and lay, would at once relieve the anxiety of the public by setting the matter right. This is not the first time that a false alarm has been sounded as to the presence of cholera, with the inevitable result of discrediting all subsequent warnings, even when they happen to be true. We could pardon such ill-advised zeal in a layman, but when such baseless announcements come forth on the authority of a duly qualified practitioner, we feel that the dignity of the profession is directly impugned.

HOSPITAL SUNDAY FOR THE ISLE OF MAN.

THE *Isle of Man Times*, remarking upon the fact of the hospital of the island being in debt, urges that a combined effort should be made on the part of the clergy and ministers of all denominations for the institution of a Hospital Sunday. The hospital is a benefit to the whole island, and as such deserves the hearty support of all Manxmen. And a Hospital Sunday is the very thing that is wanted to remove the financial difficulty under which the hospital labours at present. The arrangements necessary to be made would be

of the simplest kind, seeing that no questions of area to be included, or of selection of competing institutions to participate, which ordinarily give more or less trouble, would arise in this case. Our Manx contemporary should press its suggestion upon the notice of the islanders until they fall in with it, remembering that the promoters of Hospital Sunday everywhere have only gained their point by "pegging away" at it after once broaching the question.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE Directors of the Society held their usual Quarterly Court on the 9th inst. The chair was taken by the President, Dr. Burrows. A legacy of £1000 from Miss Brackenbury was announced. There were two fresh applications from widows for assistance. Fifty-six widows and twenty-eight children applied for a continuation of their grants, and a sum of £1260 10s. was voted to be distributed according to the wants of the applicants. The expenses of the quarter amounted to £61 12s. 3d. The meeting heard with regret of the death of the late treasurer, Dr. Hamilton Roe, and directed a letter of condolence to be written to Mrs. Roe. It was resolved that Dr. Quain should be recommended for election as treasurer at the next general meeting.

VISITATION OF EXAMINATIONS.

WE believe that the visitation is going on vigorously in accordance with the late resolution of the Council. Each examination is being visited by two gentlemen, one a member of the Council, and one not a member. The examinations of the Queen's University, Ireland, have been visited by Dr. Humphry and Mr. Power. The conjoint examinations of the Scotch bodies, of the College of Physicians and the College of Surgeons, and of the College of Physicians and the Glasgow Faculty, have been visited by Dr. Parkes and Mr. Timothy Holmes. We shall await with great interest the reports of these visitations.

THE BELGIAN CHALLENGE CUP.

IN the recent competition at Wimbledon, the Belgian Challenge Cup was won by Assistant-Surgeon Frederick W. Humphreys, F.R.C.S. Eng., of the 26th Middlesex Rifle Volunteers, who here, as on other occasions, has proved himself a master of the Snider rifle. It is pleasant to find medical officers of the Volunteers taking an active interest in and contributing to the credit of their respective corps. Accurate firing we take to be the *raison d'être* of the Rifle Service, and steadiness and coolness of head and hand are valuable attributes in its surgeons, besides helping to maintain the solidarity so desirable in a Volunteer force.

MR. STREATFEILD.

WE have much pleasure in announcing that Mr. Streatfeild has been restored by the Council of University College to the position of one of the ophthalmic surgeons to University College, a post he was obliged to resign some time back in order to comply with an arbitrary regulation of the Moorfields Ophthalmic Hospital, recently abrogated. Mr. Streatfeild will for the future take part in the clinical instruction and lectures on ophthalmic subjects, in conjunction with Professor Wharton Jones.

THE CHOLERA.

UP to the hour of going to press we are happy to announce that from no medical practitioner in London or the provinces have we received the report of a single case of cholera.

SANITARY REPORTS.

DR. STEVENSON, medical officer of health for the St. Pancras district, congratulates the inhabitants on the exceptionally healthy state of the metropolis at the present time. It appears that during the past quarter a systematic house-to-house visitation has been carried on by the inspectors in what may be called the specially insanitary localities, and that the working machinery of the district is in good order, including a mortuary and disinfecting chamber. It is to be hoped that the other metropolitan districts are equally well forearmed.

CARLISLE INFIRMARY.

OWING to an enlargement of this institution by the addition of 70 beds, the governors have deemed it necessary to appoint a second physician, and a vacancy having occurred in the surgical staff owing to the much regretted illness of Mr. Brown who, for a considerable number of years had been one of the honorary surgeons, Dr. Henry Barnes was unanimously appointed to the office of physician, and Mr. Herbert W. Page, F.R.C.S., was also unanimously appointed to the surgical vacancy.

REPORT ON DISINFECTANTS.

ON another page we give the first part of a report on disinfectants, which we commend to our readers' attention. So many agents, new and old, now compete for public favour, that it is no easy task to decide between them; and we have thought it well to supply a little practical help in the matter.

THE danger occasionally attending our national game of cricket was lamentably shown at Cambridge a few days ago, when a young lady, the daughter of a local tradesman, who was watching the progress of a match, was struck on the chest by a cricket-ball and killed. If spectators at cricket-matches in the country were kept at such a distance from the players as is enforced at the three great metropolitan grounds—Lord's, Prince's, and the Oval—there would be little danger of accidents occurring to a looker-on.

A CORRESPONDENT of the *Pall Mall Gazette* states that a gentleman living near Babbicombe, Devonshire, was recently bitten by a viper which he had carried home with the intention of taming. Very severe constitutional symptoms were at once manifested, but, under the use of remedies sedulously applied by his medical attendants, the bitten person recovered.

ONE of the causes of the failure of the Dutch in their Atchin campaign was the want of medical officers. These are still in much request by the Dutch Government, which has already offered a premium of 4500 florins, but in vain. Are there none among our young holders of licence or diploma who will join the service of the East Indian Army of Holland?

AT the Wicklow Assizes, on the 22nd inst., Johanna Lambe brought an action against John Barton and Dr. E. H. Bennett for alleged careless and negligent administration of chloroform to the plaintiff's husband previous to performing amputation, from the effects of which administration the patient died. The case shall be commented on next week.

ANIMAL poisons, whether from the snake or the mad dog, appear still intractable. Last May, at Barton-on-Irwell, a boy aged nine was bitten by a cur, and although the wound was dressed almost immediately, he died after several weeks' great agony.

THE late Lord Westbury, like not a few of the lights of the bar, was the son of a physician at Bristol. It would be interesting to show how often legal paternity is followed by great medical proficiency in the son, and how often medical parentage has been the precursor of forensic distinction.

PUBLIC analysts have been appointed under the Adulteration Act by the City of London and most of the district boards and vestries of the metropolis, by about two-fifths of the counties and about sixteen cities or towns in England and Wales, by three places in Ireland, and two in Scotland.

IT is to be regretted that the Royal Commission to be appointed to inquire into the grievances of the combatant officers were not empowered to include in their inquiry those alleged by the medical officers of the army.

SIR CHARLES WHEATSTONE has been elected Foreign Associate of the French Academy of Sciences, to fill the vacancy occasioned by the death of Baron Liebig. The election was all but unanimous.

THE excessive heat which we have lately experienced has already produced several cases of heat apoplexy. In three instances, as far as we have been able to ascertain, the attack was fatal.

WE understand that Sir R. Anstruther is about to put a question in Parliament to the Minister for War relative to the non-retirement of one of the Surgeons-Major of the Guards.

CONSEQUENT on the report of Sir Joseph Dickson, M.D., as to the immunity of Vienna from Asiatic cholera, his Majesty the Shah is at present *en route* to that city.

GERMANY has sustained a severe loss in the deaths of Dr. Brandis, her first meteorologist, and Gustav Rose, her greatest mineralogist.

THE City Corporation elected, on the 24th inst., by a very large majority, Mr. Harry Leach, as Medical Officer of Health for the Port of London.

REGULATIONS ISSUED BY THE IRISH LOCAL GOVERNMENT BOARD AGAINST IMPORTATION OF CHOLERA.

THE following is an epitome of the regulations which the Local Government Board in Ireland issued on the 9th inst., with the view of preventing the introduction of cholera into Irish ports, and to which we referred last week. The directions are addressed to coast-guards and officers of Customs in Ireland, to boards of guardians, to town councils, and to the commissioners acting as nuisance authorities on any part of the coast.

1. All officers of coast-guard or of Customs who, on boarding any vessel in which there is, or has been during the voyage, a case of cholera, or which has come from an infected port, shall require the master to anchor the vessel in such place as the officer may direct.

2. No person (except the officers as above) to land from the vessel during her detention.

3. The officer to give notice of detention to the proper nuisance authority.

4. The detention to cease as soon as the nuisance authority has caused the vessel to be medically inspected, or at the expiration of twelve hours after the above notice has been given.

5. The nuisance authority is the authority to execute the order; and, when such authority is a board of guardians, it is to provide hospital accommodation for cholera patients.

6. Nuisance authorities, when not boards of guardians, are to arrange with the guardians for a dispensary medical officer or officers or some other qualified medical practitioner, and to designate some shore hospital in which cholera patients may be received.

7. Vessels coming from an infected port, or having or having had cholera on board to be medically examined.

8. Infected vessels to be moored as directed by the nuisance authority.

9. Persons not certified by the medical examiner as infected to be allowed to land immediately.

10. Persons certified to be infected to be removed to hospital if their condition permits.

11. Persons who cannot be safely removed to hospital to be treated on board by the medical practitioner appointed by the nuisance authority.

12. Dispensary medical officers to be paid for services under the regulations; other medical practitioners to be remunerated by the nuisance authority unless their expenses are paid by the owners of the vessel.

13. The expense of treating imported cholera cases on shore to be charged upon the poor-rates of the union in which the hospital is situated unless otherwise provided for.

14. The clothing and bedding of persons attacked or dead of cholera during the voyage to be destroyed by the master before he brings his ship into port.

15. Clothing and bedding interpreted to mean clothing or bedding worn or in use by the person attacked at the time of and during such attack.

16. Provides penalties for any person obstructing the nuisance authority or officers of Customs or coast-guard in executing the order.

PROVIDENT DISPENSARIES IN MANCHESTER AND SALFORD.

A MEETING of medical men of Manchester and neighbourhood was held in the Town Hall on Friday last, for the purpose of considering the proposal to establish provident dispensaries in Manchester and Salford. On the motion of Dr. ROYLE, Mr. R. T. HUNT was called to the chair. At this meeting eighty-three medical men signed the attendance sheet, but six gentlemen and Dr. Borchardt shortly left the meeting upon the chairman ruling, in reply to a question from Dr. Borchardt, "that reporters would not be present, as in the circular convening the meeting it was explicitly stated that such would be the case; and this, therefore, was one of the conditions on which the meeting was called." The following resolutions were passed:—

Proposed by Dr. NOBLE, and seconded by Dr. REED:—"That, in the opinion of this meeting, the institution of provident dispensaries, as hitherto proposed, is not calculated to remedy admitted evils, whilst the scheme would hardly be consistent either with the due interests or the proper dignity of the medical profession."

Proposed by Dr. ARMSTRONG, seconded by Mr. J. PLATT:—"That the formation of medical provident dispensaries, as now in operation, would tend to bring the great majority of the working classes of this country, their wives and families, under one vast system of medical and surgical relief; would enter into unfair competition with, and be ruinous to the best interests of, the great majority of the medical men of this country; would create a system which is even more liable to be abused, and that on a larger scale, than the present generally admitted abused hospital charities are; and, in addition to this, it is most likely they would cause a large falling off in the subscriptions to the present medical charities."

Proposed by Mr. FRANK HOLMES, seconded by Mr. HENRY W. TOYNE:—"That, as regards the medical profession, the necessity for these provident dispensaries does not exist, since by the Poor Laws the really poor are provided with skilled medical and surgical relief free. The establishment of these dispensaries will bring them into competition with the existing friendly and other societies — originated and managed by the working

classes—for relief in sickness and distress; and considering that it has been the invariable rule of the medical profession to charge the working classes according to their means, and to accept from them payment of their accounts by instalment when necessary, this meeting is therefore opposed to the establishment of these dispensaries."

Proposed by Mr. HENRY WINTERBOTTOM, seconded by Dr. JOHN WATSON:—"That the undermentioned gentlemen be elected from this meeting to form a committee of the general profession to watch any scheme which may be proposed, and, if necessary, report to any future meeting of the profession to be called for that purpose; and that this committee consist of Dr. Royle, Dr. Armstrong, Dr. John Roberts, Mr. F. H. Walmsley, Mr. W. Walls, Mr. Charles Holmes, and Mr. Joseph Westmorland, with power to add to their number."

The proceedings terminated after a vote of thanks had been passed to the Chairman.

THE HOSPITAL SUNDAY FUND.

THE following are the contributions to the London hospitals awarded by the Committee of Distribution:—

HOSPITALS.	£	s.	d.
1. Belgrave, for Children	162	18	4
2. British	47	18	4
3. Bromley Cottage	38	6	8
4. Charing-cross	958	6	8
5. Cancer, Brompton	239	11	8
6. City of London Lying-in ...	76	13	4
7. St. Peter's	38	6	8
8. City Orthopædic	38	6	8
9. City of London, for Chest Diseases	958	6	8
10. Dental	38	6	8
11. East London, for Children ...	306	13	4
12. Evelina	287	10	0
13. French	38	6	8
14. German	287	10	0
15. Great Northern	383	6	8
16. General Lying-in, York-road ...	95	16	8
17. St. John and St. Elizabeth ...	115	0	0
18. For Diseases of the Throat ...	191	13	4
19. For Skin Diseases, Blackfriars ...	115	0	0
20. For Women and Children ...	19	3	4
21. For Sick Children, Ormond-street	575	0	0
22. London	3833	6	8
24. Homœopathic	239	11	8
26. University College	1150	0	0
27. North Eastern, for Children ...	95	16	8
29. North London Consumption ...	383	6	8
30. Queen Charlotte's Lying-in ...	191	13	4
32. Orthopædic	191	13	4
33. South London Ophthalmic ...	76	13	4
34. For Diseases of the Chest ...	383	6	8
35. For Consumption, Ventnor ...	95	16	8
38. Middlesex	2300	0	0
39. Seamen's	766	13	4
40. St. Mary's	1150	0	0
41. Samaritan Free	287	10	0
42. St. George's	2875	0	0
43. Convalescent, Seaford & Newhaven	76	13	4
44. Victoria, for Children	95	16	8
45. West London	287	10	0
46. Westminster	1150	0	0
47. Wimbledon Cottage	28	15	0
48. Royal London Ophthalmic ...	383	6	8
49. Royal Free	766	13	4
50. Metropolitan Free	95	16	8
51. Poplar	383	6	8
52. National	383	6	8
53. St. Mark's, for Fistula	287	10	0
54. British Lying-in	38	6	8
56. Male Lock	95	16	8
59. King's College	1150	0	0
61. Women's, Soho-square	143	15	0
62. Female Lock	95	16	8
63. Western Ophthalmic	57	10	0
64. For Hip Diseases in Childhood...	19	3	4

THE CHOLERA.

THE cholera is still sluggishly extending eastwards in the valley of the Danube, and westwards in East Prussia. The disease has shown itself in numerous places, but in no instance has it, to the time of the latest information, spread to any large extent. It is present in Ratschuk, Silistria, Fonsnov Severin, Shumla, Galatz, and Crajova, and other localities in Wallachia and Bulgaria. The disease continues in Pesth, but information is still wanting for the rest of Hungary. During the week ending the 8th July there were 70 new cases of cholera reported in Pesth, and 40 deaths.

In Italy there does not appear to be any marked extension of cholera. The outbreak would appear to have come almost to an end in the province of Treviso, and in the province of Venice the spread is slight. In Venice, on the 10th inst., there were 8 cases and 5 deaths, and on the subsequent day 5 cases. The official returns show from the commencement of the outbreak to the 1st July, in the province of Treviso, 41 cases and 20 deaths; and in the province of Venice, 55 cases and 16 deaths.

In East Prussia cases have occurred at Elbing and on the line of railway now making between Tilsit and Memel.

The following, according to the *Times* correspondent, is an account of the progress of cholera in Vienna:—

June	28th, 29th	5 cases	...	4 deaths.	
„	29th, 30th	2 „	...	1 „	
„	30th, July 1st ...	8 „	...	4 „	
July	1st, 2nd	1 „	...	6 „	
„	2nd, 3rd	2 „	...	2 „	
„	3rd, 4th	12 „	...	7 „	
„	4th, 5th	6 „	...	7 „	
„	5th, 6th	5 „	...	5 „	
„	6th, 7th	No return.			
„	7th, 8th	7 „	...	8 „	
„	8th, 9th	14 „	...	2 „	
„	9th, 10th	33 „	...	16 „	
„	10th, 11th	27 „	...	16 „	
„	11th, 12th	36 „	...	13 „	
„	12th, 13th	No return.			
„	13th, 14th	88 „	...	33 „	
„	14th, 15th	46 „	...	33 „	

The number of cases was increasing at the date of the last report, and the disease had shown itself in the suburbs.

Correspondence.

"Audi alteram partem."

PROFESSOR VIRCHOW.

To the Editor of THE LANCET.

SIR,—Professor Virchow, from Berlin, intends to visit London for the meeting of the British Medical Association. Will you permit me to suggest to your readers that this would be a fitting occasion to honour a man of whom Germany is so justly proud.

Virchow received his medical education in Berlin, an institution founded for the gratuitous training of students for military duties, who, in return, must serve in the army for eight years. Virchow displayed such a capability for pathological work that the authorities relieved him from military service, and appointed him pathologist in the Charité, a hospital with 1300 beds. Although a teacher in the Royal University of Berlin, and with a well-founded hope of making a brilliant career, the love of freedom induced Virchow to shoulder a musket in defence of public right. This line of action cost him an exile of nearly ten years. The King of Bavaria, always an intelligent patron of science, immediately appointed Virchow Professor of Pathology in the University of Wurzburg, where he worked so well that hardly a page of German medical literature but bears the impression of his influence. Cancer, tubercle, embolism, inflammation, pyæmia, puerperal fever, bear testimony to his activity.

After nearly ten years' absence, Virchow was recalled

to Berlin to arrest the declining popularity of the university. Every imaginable honour was heaped upon the returning exile. The government appointed him one of the physicians of the Charité, and director of the Pathological Institute. The university gave him the chair of Pathological Anatomy. The city of Berlin sent him as one of its members to the Prussian Parliament, and the inhabitants elected him to a seat amongst the municipal authorities. In the Parliament he is known as the leader of the independent liberals, and is trusted by both sides of the House as the greatest master of finance in Germany. His activity is not exhausted by those multifarious duties; he is the founder and editor of the *Archives* which bear his name. To these *Archives* he has contributed many thousand pages, in which are found the results of his giant labour. He is the active editor of half a dozen other scientific and literary journals. He is founder, and was for three years President, of the Anthropological Society of Berlin. He often gives scientific popular lectures in a style similar to those given by Faraday and Tyndall.

His lecture-room is crowded by students of every nation; his simple, manly eloquence, sometimes tinctured with a sarcasm worthy of a Juvenal, often enlivened with a wit as keen as that of a Rabelais, induces many a wearied practitioner to steal an hour from hard work for the gratification of hearing the great pathologist. During his teaching practical work with the microscope, it is not uncommon to hear him speaking to a Belgian in French, joking with a young Scotchman in English, or explaining in earnest tones a histological difficulty in Italian to a student from Rome or Naples.

With praiseworthy liberality, Virchow places the rich stores of the Pathological Institute at the disposal of all scientific men, irrespective of creed or colour. Here, whilst working as his assistant, Liebreich discovered chloral hydrate; Recklinghausen, Cohnheim, Klebs, Kühne, and Hoppe-Seyler, were his pupils and assistants, and owe their success in no slight degree to his friendly assistance and support.

The cordial reception which strangers ever meet at the hands of Virchow is known all over the world, and hardly a day elapses without the presence of three or four wandering sons of science calling to take a friendly interchange of thought with this busy, but kind-hearted man.

I feel that it is alone needful to make known, through your columns, the arrival of such a man in London, to call forth that generous hospitality which London is ever ready to give to men of merit in every walk of life.

I am, Sir, your obedient servant,

Berlin, July 19th, 1873. T. E. RUTTLEDGE.

CONVALESCENCE IN TYPHOID FEVER.

To the Editor of THE LANCET.

SIR,—The concluding paragraph of Dr. Brittan's remarks in THE LANCET of last Saturday shows that he has not quite apprehended the "rule" to which I directed attention, and which is accurately quoted in his opening paragraph. My statement was not that solid food may be safely given in typhoid fever so soon as the temperature has been normal for two days; but what I wished to enforce was that, although the state of the tongue, the skin, the pulse, the bowels, and the general aspect of the patient might be favourable, he was not convalescent, and solid food should not be given unless "the morning and evening temperatures, and especially the latter, on *at least* two successive days have remained between 98° F. and 99°"; and the words italicised were so printed in my former communication. I was advocating delay, not haste, in giving solid food, and urging the importance of watching the thermometric changes just at that period when all the other general symptoms, which experienced judgment takes into account, would seem to indicate the convalescence of the patient, but which if trusted in, to the neglect of the temperature, would often lead us astray.

Temperature alone, I quite admit, would be a bad guide, a fall below the normal not infrequently preceding for several hours the appearance of blood in the stools, the blood having passed into the bowels, but not out of them. And, on the other hand, if a typhoid patient were suffering also from phthisical mischief of the lungs, we might wait a long time before a continuous temperature between 98°F. and 99° was reached.

If the state of the tongue, bowels, &c., indicated convalescence when the temperatures were near or below the normal, in the cases reported by Dr. Brittan, these examples must not be taken as "the exceptions that prove the rule," but as strongly affirming it. Cases 1 and 3 show very clearly what may follow the too early exhibition of solid food, and the importance of the qualifying *at least* in the above rule. In Case 2 the increase of temperature on the twenty-second day appears, in its extent and duration, very like the rise sometimes caused by a catamenial period occurring about the end of an attack of fever.

Though Dr. Brittan misapprehends the meaning I intended to convey, I am glad to find he supports the view I advanced, for he says: "It may be true, and would I believe be an excellent caution if it were made a rule, that solid food should never be given until the patient's temperature has been normal for two days."

I am, Sir, yours &c.,

Cambridge, July 21st, 1873. P. W. LATHAM.

PENCIL-CASE THERMOMETERS.

To the Editor of THE LANCET.

SIR,—Having seen an advertisement in the last number of THE LANCET, by Messrs. Salt and Son, of Birmingham, bringing under the notice of the profession a clinical thermometer adapted to the American screw pencil-case, I ask your permission to bring before your readers my claim to priority of invention, as more than two months since I had a thermometer prepared on this plan. I, however, abandoned the arrangement in favour of the much more simple clinical "pencil-case thermometer," which I registered on the 3rd inst., and of which I beg leave to enclose engravings. I have, therefore, not only anticipated Messrs. Salt and Son in the application of the principle of the pencil-case in the specification of my registration, but I have introduced a highly important improvement in the addition to the thermometer stem of a silver jacket on which the graduation is engraved. The mercurial column is perceptible through a lateral slot, and the degree of temperature easily read off. This metal jacket not only affords security against the known tendency of these small thermometers to break at the lines of graduation, but it affords the opportunity of correction of the variation occurring from contraction of the glass with lapse of time.

I claim for my "pencil-case thermometer" these advantages over any other yet made—viz., simplicity and convenience of portability in the pocket (at the same time that it can be quickly elongated for the examination of internal cavities or organs); lightness and neatness; lastly, security, the octagonal shape of the slide effectually preventing it from rolling when laid upon a table.

(The opening in the case should be a mere slit, not nearly so wide as shown in the engraving.)

The engravings represent the plain pencil-case arrangement without the jacket, the instrument being made in both ways.—I am, Sir, yours obediently,

R. HARVEY HILLIARD, M.D.

Belgrave-terrace, Upper Holloway, July 21st, 1873.

PARIS.

(From our own Correspondent.)

AT the last meeting of the Academy of Sciences Dr. Tholozan, Physician to the Shah, read a very interesting memoir on the "Origin of Pest." Dr. Tholozan has searched in all the old authors, Oriental or Occidental, who have written on the pest, for documents which may elucidate the question of its origin and propagation. He has himself been able to observe the terrible disease in Persia, and he has arrived at conclusions which are novel and unexpected regarding its origin.

It was considered that the affection should be localised to certain regions, like Constantinople, Syria, and Egypt, and be connected with famine. Dr. Tholozan asserts that pest can develop itself in all countries, in all altitudes, and that its *foci*, or places of birth, are not those which had been assigned to it. He also thinks that famine is but a predisposing cause, as in 1871 it raged in Persia in a district where food was abundant; whereas in another part of the country, where famine prevailed, it was typhus and dysentery which made their appearance, and not the pest.

Such was the substance of Dr. Tholozan's communication, which was listened to with great interest by the members of the Academy; I think I may add by his future colleagues, as it is reported here that the Academy of Sciences, following the example of its sister Academy of Medicine, is about to nominate Dr. Tholozan its correspondent in the far East.

Before quitting the Academy of Sciences, I must not forget the interesting communication made at the same sitting by Drs. Rabuteau and Papillon, touching the first part of the researches which they have been carrying on in the fish laboratories of M. Coste, at Concarneau, whither they had been sent by Government. The chief discovery of the two distinguished physiologists is the presence in all the liquids and all the organs of fishes, plagiostoms, squales, sharks, &c., of a large quantity of urea, mixed with a small proportion of a compound urea, the composition of which is not yet known. It is to this last substance that is due the characteristic odour of rotten fish—the smell is simply that of methylamin. They have also made out that all the liquids of the organism in fishes have an acid reaction, even those which, in superior animals, have an alkaline reaction.

The invidious question as to whether the pharmaciens and the medical men in the French army shall continue to constitute two separate and independent bodies, or whether the medical men shall form a superior autonomy, free from the domination of the Commissariat Office, and having the pharmaciens under their direction, is raging warmly at the Paris Academy of Medicine. The question is undoubtedly one of much importance, and has been submitted for consideration by Government. The majority of the members of the Academy are evidently in favour of the latter of the two conclusions which I have mentioned above. Their desire is not in the least to render the pharmaciens subordinate, but simply to establish the autonomy of the medical body in the army, giving them greater independence and authority; and it seems that in order to effect this it is necessary to put all the medical departments of the army service—the pharmaceutical included—under the direction of the army surgeons. According to the present system, the pharmaceutical department is under the direction of the commissariat, and this increases the authority of the latter body to the detriment of the medical officers.

An important modification has just been introduced into the dietary system of the French soldier. Until now the daily ration of French soldiers had been 300 grammes of meat in time of war, and 250 in time of peace. The army surgeons, and even military commanders, had long ago recognised the utter insufficiency of this quantity of food, and since 1861 some attempt at a reform had been made by authorising the commissariat officers of each regiments to make private contracts for the purchase of meat, whereby for the same sum of money they got a larger quantity of it, and could increase thus the daily ration in meat of the soldier. Of course, with this system there were many shortcomings according to localities. Now the military authorities have adopted the more radical measure of distributing daily a ration of 300 grammes (or ten ounces of meat) to the soldiers in time of peace as well as in time of war.

Paris, July 22nd, 1873.

NOTES ON

THE INDIAN CAREER OF THE LATE SURGEON L. H. LEES, M.D.,

OF THE BENGAL ARMY.

By a Senior of the Medical Department of that Presidency.

AT Brighton, on the 19th of June, 1873, died, at the early age of thirty-seven, Leonard Home Lees, M.D., surgeon in the Bengal Medical Service, son of George Lees, LL.D. of St. Andrews. He passed the College of Surgeons in 1856, and graduated in Edinburgh in 1857.

In the year 1858 he received a commission in the Bengal Army as an assistant-surgeon, and arrived in India, *viâ* the Cape of Good Hope, in the summer of the same year. He did not remain long at the presidency. Early in 1859 we find him in temporary medical charge of a troop of Horse Artillery, stationed at Umballa in Upper India. In the following year he was posted to the medical charge of the 20th Regiment of Punjab Infantry. He accompanied this corps to China, on foreign service, and was present at the taking of the Taku Forts and the capture of Pekin. On the return of the regiment to India at the conclusion of the China war, the corps proceeded to the North-west frontier, and was stationed at Peshawur. Dr. Lees remained at Peshawur with the 20th Punjab Infantry till the end of 1862, when his services in the Military Department ceased. The Peshawur valley is notoriously unhealthy, and here he began to suffer from the malarious and other unhealthy influences which terminated the career of this talented officer.

Early in 1863 he was transferred to the Civil Department, and was appointed to the medical charge of the civil station of Akyab. He entered on his new duties with zeal and industry. Akyab is on the sea-coast on the eastern side of the Bay of Bengal, in latitude 20° 5′ N. Here he was exposed to all the deteriorating influences of a tropical climate, in addition to those peculiar to a damp and malarious locality. The mean temperature is high, and the fall of rain excessive, in some years amounting to 300 inches. In this trying climate Dr. Lees served four years, with great satisfaction to the seniors of the Medical Department, and also to the chief civil authorities of the province.

A question of great interest soon came up, requiring all the attention and talent the young surgeon could give to its investigation—namely, the cause of the sparseness of the population of the Arakan district and British Burma generally. Dr. Lees proceeded to investigate the subject in the only way in which satisfactory results could be obtained, by carefully collected and verified statistical returns. Vague and indefinite notions had existed as to the cause, but none had any pretensions of resting on a scientific basis. Dr. Lees began tabulating the births, deaths, and marriages in the town of Akyab, and this is always a most troublesome task among a people indifferent to truth and ignorant of the results to be obtained from statistical facts. He showed, in a carefully drawn up and logically reasoned report, that the sparseness of population depended entirely on a high death-rate, chiefly infantile; that one-third of all the children born in Akyab die in the first year, and of these one-fourth died from trismus nascentium. While the births to population were 43·4 per 1000, the deaths were 34 per 1000—a striking contrast to England, where the ratio of births is 33, and that of deaths 22·5 per 1000.

Dr. Lees, by tabulated statements, showed that the women of Burma were more prolific than their sisters in England, each Burmese mother having, on an average, 5·5 to 6 children, while English women have, on an average, 4·2; further, the average age at death is 26·5 in Burma, in the United Kingdom it is above 40. The causes of the high infantile death-rate he enumerates are, deficient

maternal nourishment, improper food (newly-born infants being often stuffed with rice), want of attention, deficient clothing, defective sanitary condition of towns, injury to the navel cord, causing tetanus; and, he believed, that infanticide was practised. This, I understand, was indignantly denied by the highest civil authority in the province, but the doctor was by far too honourable and honest to be deterred from expressing what he believed to be the truth.

Dr. Lees had, besides the usual medical duties of a civil station, to attend the sick of the crews of the various vessels trading to Akyab. From October to May is the only period of the year it is safe to enter the port. During the S.W. monsoon vessels would be in danger of being blown on a lee-shore, as the natural harbour is open in that direction.

In my inspection visit to Akyab in December, 1865, I had an opportunity of seeing Dr. Lees' hospitals and dispensary in most satisfactory working order. The Seamen's Hospital and Dispensary, a wooden structure, like most of the other habitations of the place, is built on piles with the floor about ten feet from the ground. The mode of building of this Eastern people (by a kind of instinct) is well calculated to protect them from extreme damp and malaria, and there can be little doubt that they suffer less from malarious influences than the Bengalee, who sleeps on the floor of his hut on a level with the ground. I had formed the opinion that the high temperature with extreme humidity of Akyab caused the climate to be extremely relaxing and trying to the European constitution, and I find the following in my notes:—"Few persons can remain here for many years without being prostrated in health to such an extent as to render change to a more bracing climate an absolute necessity."

While in Akyab, Dr. Lees contributed an able paper to the *Indian Medical Gazette* on Scurvy. He had seen much of the disease in its worst forms among the crews of vessels arriving at the port, chiefly from Aden. These ships carried coals to that place, and as little or nothing grew on the barren rock, vessels had to proceed to sea (with crews already tainted with scurvy) on a second long voyage, without a supply of fresh vegetables so urgently required. The lime-juice on board was either decomposed or adulterated with sulphuric acid, and was thus either pernicious or useless. Even in the worst cases little medical treatment was required; an improved dietary, with a plentiful supply of fresh vegetables, rapidly restored the patients to health. Lees urged the necessity of more stringent laws, to prevent the often terrible results of the mean, selfish, and short-sighted economy of the owners and captains of ships, who frequently do not provide a proper supply of food for their seamen on long voyages. The accommodation on board is also often most defective, and such as is likely to impair the health of the sailors. He asserts that the crews of foreign vessels have, as a rule, better accommodation than those of English ships.

Early in 1867 Lees, still an assistant-surgeon, was appointed to the medical charge of the civil station of Mirzapore, in the North-west Provinces. The locality is healthy, and the appointment would have been in every way well suited to him in an earlier part of his career, but the change came too late for his impaired health, and in a few months he was obliged to proceed to Simla, one of the hill sanitaria in the Himalayas, on sick leave. On the expiration of this leave he obtained the temporary appointment of secretary to the Sanitary Commissioner, and accompanied that officer in his tour through the provinces.

In April, 1868, he was appointed to the joint medical charge of Simla. Here the duties are of a somewhat arduous character to any man not in robust health. Mounted on his hill pony, frequently clad in waterproofs, the medical officer makes his round of visits in all weathers. The rainy season sets in early in the hills, generally before the end of April; at this time heavy rain, accompanied with loud and terrific peals of thunder and vivid lightning (not unattended with danger), is no uncommon occurrence. Disregarding all this, the doctor has to make his way to the numerous houses scattered over the hill-tops and flanks of the mountains. Now and then, if the weather is clear, he may obtain a view of the snowy range—a glorious sight at all times.

Although Simla is more than 6000 feet above the level of the sea, it is by no means free from the dangers caused by the neglect of sanitary laws. Diarrhœa, of a severe and frequently intractable character, is very prevalent; and Dr. Lees, with his constitution already impaired by four years' residence in tropical Akyab, did not escape. There is reason to believe that the disease is the result of defective sanitary regulations: the heavy rains having been allowed to carry excreta and all kinds of filth into the adjacent valleys, where a higher temperature exists than on the mountain slopes, deleterious emanations arise, tainting the atmosphere up to the highest inhabited elevation.

The duties of the Simla charge extend only from April to October. By the end of that month the numerous visitors have returned to the plains, and later in the year a long and somewhat severe winter sets in. The great Himalayan mountains are then frequently covered with snow. The doctor and some other residents remain throughout the winter—a severe ordeal to a tropical invalid: beneficial to some, very hurtful to others. Two years were passed in this charge. Early in 1870 Dr. Lees had to return to the plains. He obtained the appointment of Civil Surgeon of Umballa. This was at one time the chief military frontier station in Upper India, but after the conquest and annexation of the Punjab it became a place of secondary importance. Dr. Lees had only to perform the medical duties of the civil station, but an able and active surgeon like our deceased friend would have soon made himself extensively useful had his health permitted him to remain. With such a man at a large civil station advice, particularly in surgical cases, is eagerly sought and much valued by every class of natives in his district.

Such was the position our friend occupied at the close of the year 1870. His health was now seriously impaired, and at the commencement of the hot season of 1871 he had again six months' sick leave to Simla. Returning to the plains in no better health, he obtained leave to proceed to England in November, 1871, with a constitution too severely shattered by Indian disease to rally in this country; and organic disease of the liver and kidneys, followed by dropsy, terminated his career. And so passed away an amiable, able, and accomplished member of the Bengal medical service, regretted and esteemed by everyone who knew him intimately, as the writer of this narrative did. J. S.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 17th:—

Burn, George Wilson, Fleet-street, E.C.
Hooper, Alfred, Burton-on-Trent.
Joseph, George William, Liverpool.
Pilkinton, William Binns, University College Hospital.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Heubeck, Fredk. Emanuel, St. Mary's Hospital.
Bartenshaw, Thomas, London Hospital.

CHOLERA is raging in Missouri, America.

A BAKER was fined £5 and costs a few days ago, at the Thames Police-court, on conviction of having sold bread adulterated with alum.

POLICE statistics show that there are more street accidents in Dublin than in any other town of its size in Europe.

So great is the dread of cholera in Turkey that all arrivals from Venice, Roumalia, and the Euxine are quarantined at the entry of the Bosphorus.

MEETING OF POOR-LAW MEDICAL OFFICERS OF ENGLAND AND WALES.—It is proposed to hold a meeting of Poor-law medical officers of England and Wales, on Thursday, August 7th, at 3.30 P.M., in one of the lecture-rooms of King's College, in connexion with the approaching annual meeting of the British Medical Association, under the auspices of the Poor-law Medical Officers' Association, and under the presidency of Dr. Lush, M.P., President of that Association. The attendance of Poor-law medical officers is invited to discuss the objects at which the Association should aim, and the best mode of furthering the same in the next Parliament.

Medical Appointments.

ALEXANDER, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Parish of Watten, Caithness-shire, vice Mill, deceased.

CAVAFY, J., M.D., M.R.C.P.L., has been appointed Physician to the Victoria Hospital for Sick Children, Chelsea.

CREESMAN, J., M.D., M.R.C.S.E., has been appointed Medical Officer for District No. 1 of the Buckingham Union.

COOKE, J. W., M.R.C.S.E., has been appointed Medical Officer to the Barnstaple Gaol, vice Cooke, deceased.

COREY, H., M.D., has been appointed Resident Surgeon, North Charitable Infirmary and City of Cork General Hospital, vice Holland.

DEATH, T., M.R.C.S.E., has been appointed Medical Officer for District No. 2 and the Workhouse of the Buckingham Union.

DOWMAN, J. R., M.R.C.S.E., has been appointed Medical Officer for the Hartland District of the Bideford Union.

DUNBAR, A., M.B., has been appointed Assistant Medical Officer to the West Derby Union Workhouse, vice Harris, resigned.

DUNDAS, G. H., L.R.C.S.I., L.R.C.P.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Moynalty Dispensary District of the Kells Union, Co. Meath, vice Ringwood, resigned.

ELLIOTT, Dr. C. N., has been appointed Medical Officer for the Workhouse and the Southern District of the Whittlesey United Parishes, Cambridgeshire, vice King, resigned.

FLEMING, C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Harthill District of the Worksop Union, vice Wilkinson, resigned.

FLETCHER, T. B. E., M.D., F.R.C.P.L., has been appointed a Consulting Physician to the West Bromwich District Hospital.

FOSTER, B. W., M.D., L.K.Q.C.P.I., M.R.C.P.L., has been appointed a Consulting Physician to the West Bromwich District Hospital.

GILLESPIE, M. J., M.D., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Frenchpark Dispensary District of the Castlerea Union, Co. Roscommon, vice M'Donnell, resigned from ill-health.

GORDON, J. H., M.D., has been appointed Medical Officer of Health to the Alderbury Rural Sanitary District: £50 per annum.

GREENWOOD, N., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Penryn District of the Falmouth Union, vice Trenery, resigned.

HICKSON, A. T., M.B., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Maryborough Dispensary District of the Mountmellick Union, Queen's County, vice Jacob, resigned.

HOLLAND, H. F., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Workhouse, Ampthill Union, vice Ernsbud, resigned.

HOLLAND, J. C., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ardmore Dispensary District of the Youghal Union, vice O'Connor, resigned.

IRVING, J., M.B., C.M., has been appointed Assistant House-Surgeon to the Huddersfield Infirmary, vice Johnstone, resigned.

LEWIN, C., L.R.C.P., L.M., has been appointed Medical Officer to Court Perseverance of the Ancient Order of Foresters and to the United Kingdom Assurance Corporation (limited) at Leicester.

LOWSON, D., M.B., C.M., has been appointed House-Surgeon to the Huddersfield Infirmary, vice Smith, resigned.

LYNES, E., M.D., has been appointed Certifying Factory Surgeon for the City of Coventry, vice Edmond Waters, L.R.C.P.Ed., deceased.

MORRIS, C. W., M.R.C.S.E., has been appointed Medical Officer for the Campden and Mickleton Districts of the Shipston-on-Stour Union.

O'BRIEN, J. J., L.R.C.S.I., has been appointed Medical Officer &c. for the Clarina Dispensary District of the Limerick Union.

ODELL, W., M.R.C.S.E., has been appointed House-Surgeon and Secretary to the General Infirmary, Hertford.

PETTIGREW, J. B., M.D., M.R.C.P.Ed., F.R.S., has been appointed Lecturer on Physiology at Surgeons' Hall, Edinburgh, vice Gamgee, appointed Brackenbury Professor of Practical Physiology and Histology, Owens College, Manchester.

PHILLIPS, J. M., M.D., M.R.C.S.E., has been appointed Medical Officer for District No. 3 and the Workhouse of the Cardigan Union, vice Mathias, deceased.

REDMOND, G. O'C. F., M.D., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Cappoquin Dispensary District of the Lismore Union, vice Owens, resigned.

REID, R. W., M.B., C.M., has been appointed Demonstrator of Anatomy at St. Thomas's Hospital, vice Anderson, appointed Professor of Medical Science at Jeddo.

SHEDD, E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 2 of the Chelmsford Union, vice Hornblow, resigned.

TURNER, H., M.R.C.S.E., has been appointed an Hon. Medical Officer to the Norwich Dispensary, and to the Jenny Lind Infirmary.

WAGSTAFF, T. H., M.R.C.S.E., has been appointed Medical Officer for the Swinefleet District of the Goole Union, vice Shirley, resigned.

WILLIAMS, W. J., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Heavitree and St. Leonard's Districts of the St. Thomas Union, Exeter, vice Coxwell, resigned.

Births, Marriages, and Deaths.

BIRTHS.

HOLLIS.—On the 16th inst., at *New* Cavendish-street, the wife of Wm. A. Hollis, M.D., of a son.

M'DONALD.—On the 2nd of April, at Hamilton, Tasmania, the wife of Wallis M'Donald, M.R.C.S.E., L.R.C.P.Ed., of a daughter.

PURVIS.—On the 19th inst., at Royal-hill, Greenwich, the wife of J. Prior Purvis, M.R.C.S.E., of a son.

STARK.—On the 17th inst., at Barrow-in-Furness, the wife of P. W. Stark, M.D., of a daughter.

TILY.—On the 18th inst., at Stone House, Richmond, Surrey, the wife of Dr. Tily, of a son.

WORKMAN.—On the 17th inst., at Teignmouth, the wife of C. J. Workman, M.D., of a son.

MARRIAGES.

CASSIDY—ARGUE.—On the 8th inst., at the Parish Church, Sandhurst, D. M. Cassidy, L.R.C.P.Ed., to Helen, daughter of the late James Angus, Esq.

DREW—HONEYBORNE.—On the 15th of April, at Beaufort West, Cape of Good Hope, H. W. Drew, M.B., M.R.C.S.E., to Cherry Gerald ne Honeyborne.

M'LAURIN—SOMMERVILLE.—On the 17th inst., at the Presbyterian Church, River-terrace, London, Dr. M'Laurin, of Caledonian-road, to Isabel M., daughter of James Sommerville, Esq., of Regent-park-square, Glasgow.

DEATHS.

DAWSON.—On the 7th inst., at Ardness House, Lochaline, Morvern, Argyleshire, Dr. Francis Dawson.

LASSETTER.—On the 13th inst., R. Lassetter, M.R.C.S.E., of Bramshall, Staffordshire, aged 67.

PIRRIE.—On the 16th inst., at Liverpool, John Millar Pirrie, M.D., of Belfast, aged 48.

RALFE.—On the 18th inst., at Queen Anne-street, Mary Howard, the wife of Charles Henry Ralfe, M.A., M.B.

SKENE.—On the 18th ult., John Skene, L.F.P.S. Glas., of Helensburgh, Dumbartonshire.

WATERS.—On the 15th inst., Edmond Waters, L.R.C.P.Ed., of Coventry, aged 53.

Notes, Short Comments, and Answers to Correspondents.

MORAL LIFE-BOATS.

THERE is now at the estuary of nearly all our great rivers, and within easy access of our chief sea-ports, one or more training-ships for boys. A few of these are designed for the sons of the more favoured classes; but the majority extend their hospitality and discipline to the poor little Arabs of the streets. Lord Dalhousie, commenting the other day at Dundee on the good rendered to the community by the *Mars* training-ship, dwelt strongly on the relief to the rates and on the lightening of the police reports by the timely "snatching of these little brands from the burning," and the conversion of the precocious vagabond and thief into a smart, capable, self-respecting sailor-boy. In this way, not only our mercantile marine, but our navy can always command a supply of efficient hands—a consideration which puts the latter at a distinct advantage over our army, with its not very satisfactory recruiting system. The health of the boys is reported at every training-ship to be exceptionally good; their moral discipline is much above the average of the ragged and reformatory schools; while their skill, not only in seamanship, but in various handicrafts, such as carpentering, shoemaking, roping, and so forth, puts them in possession of the means of earning a livelihood even when the opportunity of going to sea is withheld. By all means let us have more of these "moral life-boats."

Beta, (Ashby.)—The remedy is doubtful. A solicitor should be consulted.

THE MAYORALTY OF DUBLIN.

To the Editor of THE LANCET.

SIR,—In your journal of the 19th inst., under the head of "Ireland," from your own correspondent, the following appears:—"The election of Lord Mayor of Dublin for the year 1874 took place last week. There were two candidates, one a medical man, Dr. Owens, better known in the semi-political arena of the corporation than in the profession; the other was an extensive manufacturer and employer of labour, who was elected by a large majority of votes."

Now, I feel confident you will allow me to contradict a statement which, if permitted to pass, might prove injurious to me. In the first place, I flatter myself I have the honour of, not only the acquaintance, but the friendship of the greater number of the medical and surgical profession in Dublin, where I have passed many years in the practice of my profession, and where I have on every occasion, without a single exception, received the greatest kindness and attention from my medical brethren. In the second place, whilst I have ever firmly held my own political views, I have never uttered a word to offend the opinions of others, and it is incorrect to say I am beaten by a large majority of votes.

I remain, Sir, your obedient servant,
GEORGE R. OWENS, M.D.,
Lower Baggot-street, Dublin, July 21st, 1873. J.P. City of Dublin.

M. A. B.—Oxygenated water, better known as peroxide of hydrogen, is still, or was very recently, manufactured and sold in London. We fancy Mr. Robbins, of Oxford-street, makes it. The action of chlorate of potash is quite different.

Dr. Webster, (Golcar.)—We do not know of any such establishment. We would suggest an advertisement in the daily papers.

DRESSING WITH MAGNESIA.

To the Editor of THE LANCET.

SIR,—The letters on the subject of earth-dressing for wounds lately published in your columns will, I trust, cause the almost obsolete "calamine" to again come into use. "The calamine, a native carbonate of zinc, blended with a portion of iron, and sometimes with other substances, is found in quarries of considerable extent in Derbyshire, Gloucestershire, Nottinghamshire, and Somersetshire, as also in Wales"; and it has been used in the calcined and powdered state as a dressing for wounds and ulcers for generations. It was the basis of the London Pharmacopœia preparation, "cerutum calaminæ," otherwise called "Turner's cerate." I have found it useful in burns and ulcers.

Yours truly,
Clay Cross, Derbyshire, July, 1873. WM. J. WILSON.

EUCALYPTUS GLOBULUS.

DR. A. G. REID, in his Report on the health of Hankow, China, published in the *Customs Gazette*, gives the results of his treatment of several cases of intermittent fever with the Eucalyptus globulus. In the fevers of that country the dose probably requires to be much larger than what has been found effectual in the milder intermittents of Europe. The preparation used was Savory and Moore's liquid extract, drachm doses of which were administered in one case every two hours. As much as seven drachms and upwards were taken during the day in other cases. Dr. Somerville evidently considers that full doses of the remedy are required, and he adds that they were here taken without other inconvenience than frontal headache and a feeling of nausea, both of which soon disappeared when the remedy was given up. Dr. Reid's experience has been too limited to enable him to place a value on the drug; but if the results of its use in other hands will confirm the statements of Gubler, the introduction of the tree into the malarious districts of China must prove of great value. We understand that this drug has been used successfully in the Mauritius for combating the effects of malarious fever, and that it is intended to cultivate the tree more extensively at that station.

Yusuf (Brixton) will oblige by sending in his manuscript *quam primum*.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I am almost ashamed to ask insertion of this letter in your pages, which have lately been so largely and ably devoted to the interests of army medical officers; but I think, with respect to the recent sudden removals of regimental medical officers, you and your readers may be astonished to read the following words which in August, 1870, the Director-General circulated to allay the fears and apprehensions of some impending change which then existed in the minds of these officers—viz.: "I have also to add that the scheme for reorganising the department will not affect any regimental officer, or alter his position for at least five years." This seems a rather astounding divergence between promises and practice, which requires an explanation to remove the sinister impressions evoked by it as to the *real* position, status, &c. &c., of the head of the medical department. What confidence can officers place in pledges or Warrants so readily violated? *Punica fides* characterises them all, and they are altered or transformed to suit the whims or prejudices of other departments as rapidly as the scenes of a pantomime. Objections also I see are made to Clause 20 of the above Warrant—objections, I fancy, somewhat selfishly resting on ideas of promotion, and held by officers of a certain standing. For my part I consider the enforced retirement at fifty-five years by a hard and fast rule both unjust and cruel to individuals, and prejudicial to the public service. I hold that, irrespective of age, any *competent* officer as he rises to the top of the list should have his chance of obtaining the only prize really worth having in the service, and which secures him a moderately decent pension, the flow of promotion being kept up by the limited five years' tenure of such appointments. If the fifty-five years' retirement is maintained, the Director-General should at least be invested with discretionary power to retain, say, out of the twenty senior surgeon-majors, the services of such officers as he considers to have claims for promotion, who are in every respect eligible for active service, and who are so near that promotion as to have it almost within their grasp, but would otherwise lose this reward of their twenty-eight or thirty years of meritorious service. I need scarcely say that this prize makes the whole difference between a successful or unsuccessful professional life. If medical men in civil practice can work up to sixty-five or seventy years, why should a military officer be dismissed at fifty-five if still in every respect efficient, and retired on a pension barely sufficient to maintain him in a state of semi-respectable pauperism?—a scarecrow to warn others from a similar fate. This plan would scarcely obstruct promotion (limited to the number of senior officers as previously proposed), and would increase the efficiency of the service by elimination, sifting the grain from the chaff, and leaving the latter still under the fifty-five years' clause. You, Sir, and your readers can conceive a much more vivid picture than my pen can give of the disgust and disappointment of a man thus prematurely banished from a service to which he has sacrificed the best part of a life-time.

In conclusion, Sir, allow me, in the spirit with which the poor woman threw her mite into the treasury, to offer my humble tribute of thanks due to you for the able, generous, and admirable manner in which you have supported the medical officers of the army.

I am, Sir, your obedient servant,

Bengal, June, 1873. A. M. D.

*** The document quoted by our correspondent was, we understand, forwarded to India, and was seen and read, as it was of course intended to be, by many medical officers serving there. It is very important, in making a quotation, but especially where inverted commas are used, to adhere to the exact wording of the document quoted. The omission of a few words, as in this case, conveys a false impression and an unjust one. The official document, as stated by a correspondent last week, said that the scheme for reorganising the department would not, *if approved*, affect any regimental officer or alter his position for at least five years. We presume that our correspondent is no more able than ourselves to state how far, or in what respects, the original scheme was approved.—ED. L.

WITH reference to the appeal we inserted in our issue of 5th April, 1873, at page 512, we are requested to acknowledge, with many thanks, the following sums collected by James Milward, Esq., of Cardiff, for the "young medical man" whose case was recommended by Sir Wm. Fergusson, Bart., and other eminent members of the profession. Further help is still needed.

Dr. Taylor	£0	2	6	Morgan Williams	£0	2	6
A. P. Fiddian, M.B.	0	2	6	R. H. Pritchard	0	2	6
Dr. Buist	0	3	0	D. E. Jones	0	2	6
E. H. Evans	0	2	6	T. O. Pratt	0	2	6
Chas. Bines	0	2	6				

THE SKIN HOSPITALS.

To the Editor of THE LANCET.

SIR,—Having taken a prominent part in the movement for the erection of St. John's Hospital for Diseases of the Skin, I am bound to reply to the remarks by which you, as Editor of THE LANCET, endeavour to hamper the efforts which are being made to awaken public sympathy for a class of sufferers who are nationally uncared for.

You state in an article which appeared in THE LANCET of the 12th inst. that the patients suffering from skin disease can always obtain sufficient "accommodation and the most skilled advice at any of the general hospitals." Now, permit me to remind you that you also stated in an article which appeared in THE LANCET on the 3rd May that the general hospitals had two serious defects, your own words being: "The chief wants in relation to them (skin diseases) are, first, a better arrangement of baths in the general hospitals; and, secondly, a more generally diffused knowledge of the subject amongst the profession." Having admitted the deficiency which exists in the general hospitals in May, I am surprised that you should now represent them as so nearly perfect.

But, after all, perhaps the real point of the controversy, which I am sorry to say exists between us, lies in the objection which you have to special hospitals. Let me ask, are the public to understand that the special Hospital for Consumption, the special Hospital for Cancer, the special Hospital for Diseases of the Eye and Ear, the special Lock Hospital, and other existing special medical institutions, have no right to exist? If so, then permit me to draw your attention to the fact that your opinion is at variance with that of not only the public, but very many most eminent, past and present, members of the medical profession. If, however, you approve of the existing special institutions, what objection, on public grounds, is there to London having a special hospital for the study and treatment of cutaneous diseases? Surely it would be better that our medical students should gain their knowledge and experience of these diseases at home than at Paris or Vienna, whither they are now obliged to resort if they desire to acquire any deep insight into this order of diseases.

Your articles are evidently based upon the erroneous assumption that the existing hospital accommodation in London is sufficient to meet the wants of those who have to depend upon charity for proper medical treatment. Surely, Sir, you do not wish such an assumption to gain many supporters; surely you do not wish to confine the benevolence of our philanthropists to simply perfecting and supporting existing hospitals, knowing as you must how crowded our hospitals are, and their real insufficiency to meet even the existing demands.

Again, let me refer you to your article of the 3rd May, in which you say: "The money necessary to establish the proposed hospital would suffice to build and maintain baths, equal to those at University College Hospital, at every general hospital in London; and to build such baths would enable the students at every medical school to acquire practical knowledge of the best way of treating these disorders." From this it is clear, by your own showing, that only one hospital in London is provided with even the baths necessary for the proper treatment of skin disease patients, and that in that hospital alone have the students any chance of acquiring "practical knowledge" of the best way of treating these diseases.

I am now content for the present to leave this controversy, as, by your own words, I am enabled to show that if London desires to do its duty, it must spend an amount of money sufficient for the erection of a special hospital in simply providing existing hospitals with baths for the treatment of that class of diseases, for which at present there is in London no adequate provision.

The building of the special Hospital for Diseases of the Skin is feasible; would supply a great national want; would put London upon a footing of better equality with Paris, Vienna, and Belfast; would enable our medical students to acquire that "practical knowledge" which you admit they have not at present the facilities for obtaining in London, and would simply carry out the principle that has been found to work so advantageously—viz., that special classes of diseases require special provision, of which the rich avail themselves by consulting eminent specialists, and the poor by going to special hospitals.

I am, Sir, your faithful servant,

CHARLES MERCIER,
Vice-Chairman, St. John's Hospital for Diseases of Skin, Building Fund Committee.

Albert-terrace, Albert-gate, Hyde-park, July 15th, 1873.

To the Editor of THE LANCET.

SIR,—I regret that you have not done St. John's Hospital for Diseases of the Skin the justice of publishing the letter which it was my duty to address to you last week. I took care in that letter to avoid saying anything that could be in any way objectionable to you, though, of course, I was bound to draw attention to the contradictory statements made in THE LANCET's articles of the 3rd May and 12th July.

Now, it is my duty to inform your readers (as I trust you will not withhold my letters) that even the baths of which you speak, as being in existence at University College Hospital, were introduced there by a medical man who had himself studied diseases of the skin at St. John's, and that, therefore, the very improvement in the one general hospital, which you admit as absolutely necessary for the proper treatment of those affections, really emanated from St. John's.

I regret that I have now to take exception to the injustice you do St. John's in attempting to stigmatise it as "an insignificant hospital." Notwithstanding its limited means and restricted accommodation, it has in ten years relieved upwards of twelve thousand *new* cases. To prevent misconception on your part, I must explain that this number is exclusive of the cases that have been *re*-entered from time to time, and also that a large number of these patients had been previously attendants at general hospitals, where, however, they failed to derive benefit. An impartial person, it seems to me, would at once admit that the latter fact of itself proves the advantage of special hospitals for the treatment of diseases of the skin.

Your obedient servant,

Albert-terrace, Albert-gate, July 22nd, 1873. CHARLES MERCIER.

*** It was not from the unworthy motives insinuated by Capt. Mercier in his second letter, but from want of space, as stated last week, that we postponed the publication of his first letter. For our remarks on the above see page 137.—ED. L.

DRUNKENNESS IN LIVERPOOL.

THE vice of drunkenness is frightfully on the increase in the "New York of England." Scarcely a day passes without the magistrates seeing a little girl from the workhouse bringing down a baby to be given to a woman in the dock who has been apprehended for drunkenness. On one day last week as many as 175 persons were in custody for simply drinking. The new Licensing Act has done good; but, according to Mr. Aspinall, it has not had much effect in reducing the number of apprehensions. Private drinking in houses is a difficulty in the problem which most people underestimate. Education, before which the drinking habits of the upper ten thousand disappeared, is the agent which alone can work the same effect on the lower classes.

Dr. James Weaver.—We shall be happy to publish the cases.

CANCER OF THE RECTUM, WITH COMPLETE OBSTRUCTION; COLOTOMY.

To the Editor of THE LANCET.

SIR,—I think the following case may be deemed worthy of insertion in your valuable journal:

Wm. J——, aged fifty-nine, for eighteen months has had symptoms of cancer of the rectum, gradually increasing in intensity. Bowels had become more obstinate day by day, and at last complete obstruction supervened. I recommended colotomy, but this met with opposition from his friends. At last, after seventeen days' complete obstruction, I was requested to do what I could to relieve him.

July 16th.—He now has an enormously distended abdomen, hiccup, stercoraceous vomiting, and a thready feeble pulse, and seems almost beyond hope. Assisted by Mr. Foster and Mr. Holderness (the former administering chloroform), I opened the colon in the left loin, having previously secured the gut to the edges of the wound by means of sutures. A large quantity of fæcal matter escaped through the wound. A moderate amount of stimulant and fluid nourishment was ordered, and he was to remain quiet until I saw him the following morning.

17th.—He is much relieved; free from pain; vomiting ceased; pulse comparatively quiet; an enormous amount of fæcal matter had escaped into the bed.

The patient's progress was steady from day to day. At the end of three weeks he was able to dress himself. The difficulty now was prolapsus of the gut and some contraction of the wound, rendering the prolapse at times difficult to reduce. To obviate this, I had an ivory plug, about an inch long, conical in shape, screwed on a flat wooden plate, passed into the orifice; this effectually kept the gut in position. The plate was well padded, and secured by tapes tied round the body. This was removed every night, and caused no irritation.

At the end of six weeks he was able to walk to my house, a distance of a mile and a half. He continued in a fair state of health for some months, when he became gradually weaker, and died from the natural progress of the disease on June 13th, having lived eleven months after the operation.

Post-mortem.—The intestines only were examined, owing to shortness of time. The gut was firmly adherent to the wound. The small intestines and cæcum were naturally distended. The ascending and transverse colon were contracted, and nearly empty. The descending colon was distended, but contained no fæcal matter. The rectum was blocked by a large mass of cancerous matter, and was quite impervious and disorganised.

I remain, Sir, yours faithfully,

HERBERT LUCAS,
Surgeon to the County Hospital, Huntingdon.

Huntingdon, June 17th, 1873.

One of the Tricked.—It is unlikely that any good would be gained by the insertion of a communication couched in the terms employed by our correspondent.

A SPECIAL ANNOUNCEMENT.

THE following advertisement appeared in *The Times* of Wednesday last:—

"ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Mr. Lane will deliver his Lecture on Tertiary Syphilis (unavoidably postponed on July 9th) this day at 3 P.M."

This advertisement, which was inserted doubtless by some indiscreet and over-zealous friend of the lecturer, can hardly be said to be exactly in accordance with the spirit of the recent resolution of the College of Surgeons.

Delta.—All Acts of Parliament are obtainable of Messrs. Eyre and Spottiswoode, Her Majesty's printers, East Harding-street, Fetter-lane, E.C.

Dr. Alexander Dyer is thanked. The matter is noticed in our present issue.

THE CHOLERA IN DRESDEN.

To the Editor of THE LANCET.

SIR,—An extract from a letter just received from a physician of high standing may be of interest to many of your readers:—

"The first case of Asiatic cholera here occurred about four weeks ago. A boatman, coming from Bohemia, was attacked with the disease, and was removed to the hospital (the Deaconesses') in the new town, where he died in less than four hours. A week later another boatman was brought to the same hospital with a severe attack of cholera, but he recovered. Two days afterwards the driver of a cart conveying stones from the Elbe was brought to the hospital with a slight attack of cholera. Since then no other case of cholera has occurred on the right bank of the river. Subsequently to the cases mentioned, a fireman of an Elbe steamer, ill of cholera, was carried by his friends to the village of Gorbitz, on the left bank of the river, below Dresden. From this single case, Gorbitz and some neighbouring villages became infected; one of them, Lobtau, may be almost considered as a suburb of Dresden. All the cases of cholera in this city mentioned in the last official report, which I enclose (giving from the 1st to the 19th instant 18 cases, of which 9 ended fatally, 5 recovered, and 5 remained under treatment) were of persons connected with inhabitants of the villages mentioned and referred to. Up to this moment not one genuine Dresden case has been known, nor have we a suspected house in the town." I am, Sir, yours, &c.,

Neville-street, Onslow-gardens, July 22nd, 1873. R. R. NORT.

MAD DOGS.

M.D. writes a smart and well-warranted letter to *The Times*, complaining of the barbarous treatment to which dogs are subjected on railway journeys. He found his dog which he had booked on the South-Western main line locked up in a box about as large as a packing-case for three dozen of wine, with no opening to the outer air, and only one hole, about an inch in diameter, admitting air from the interior of the guard's van. "This den he was to occupy for two hours." On going out at Woking station to get some water from the refreshment-room for the dog, the Company's servants declined to wait for him, and he was left behind. "My acquaintance," adds M.D., "with races of savages is not large doubtless, however, the South-Western Railway would be able to quote the practice of some semi-human tribe in justification of their cruelty."

Eyrotaus (Clifton.)—At the Vienna Exhibition there is on view an invalid's couch, devised by an Austrian physician, over which a large fan of peacock's feathers is kept gently vibrating *à la punkah*. In the tropical atmosphere of the building the spectacle almost makes one wish to be an invalid!

Dr. Swift Walker's letter will appear next week.

FINING OF JURORS FOR NON-ATTENDANCE.

To the Editor of THE LANCET.

SIR,—I observe in your last issue a letter from Mr. Roger Hughes, of Bala, referring to the fact of some jurors having been fined for non-attendance at the last Dolgelly Quarter Sessions, notwithstanding his certificate that they were "too unwell to attend." His certificates (three in number) were in the same words, and to the following effect—viz.:

"This certifies that Mr. (name) is under my care, and not in a fit state of health to appear at Dolgelly on the 2nd July, 1873.
"25th June, 1873." (Signed) ROGER HUGHES, Surgeon.

These certificates were, I believe, sent to the Under-Sheriff by post, without any proof of authenticity, and no one was present in Court to prove them or the facts stated in them. The certificates themselves do not state what the cause of unfitness to attend was, and I think you will admit that nothing could be more dangerous than the admission without any inquiry of such certificates, which might or might not be genuine. The law on the subject is perfectly clear. I would refer Mr. Hughes to the 53 sect. of the 6 Geo. IV., c. 50, which renders jurors liable to a penalty for non-attendance, "unless some reasonable excuse shall be proved on oath or affidavit." I so advised the Court. We were unable to get a second jury owing to the absence of these and other jurymen, who were also fined; and the public business and the time of the Court were both improperly interfered with.

I am, Sir, your obedient servant,

EDWARD BREESE,
Portmadoc, July 23rd, 1873. Clerk of the Peace for Merionethshire.

HEALTH OFFICERS IN THE POTTERIES.

WE have received two communications in reference to our last week's annotation on this subject, which we are obliged to postpone noticing until next week.

M.R.C.S. and L.M., (late H.M.S.)—We do not think the two examinations alluded to would be recognised in the way our correspondent desires.

Dr. James Ross's letter shall be kept in mind.

THIRD ATTACK OF MEASLES.

To the Editor of THE LANCET.

SIR,—Will you permit me, as a constant subscriber, to submit, through the columns of THE LANCET, to my professional brethren a case which to me is not simply anomalous, but unparalleled.

I have a young lady, about twenty-three years of age, suffering for the *third* time from an attack of measles! All the characteristic symptoms, such as the eruption, the deeply congested state of the mucous membranes of the eyes, nose, larynx, and bronchia, are most pronounced. The patient's mother was in the habit of recording her children's maladies as they appeared, and among these occurs the first attack of measles in my patient; the second one took place at school about twelve years ago, which my patient clearly remembers; and now the third attack.

I shall feel very thankful if any member of the profession among your readers who has met with a similar case would kindly state it through your columns. I am, Sir, yours truly,

Leigh, Manchester, July 19th, 1873. CHAS. ANDERTON.

Mr. W. S. Wilson, (Clay Cross.)—We presume the Wodhall Spa, Horncastle, is that referred to by our correspondent; but we are unable to express any opinion as to its probable effects in the case in question.

W. A.—In THE LANCET for July 19th.

WHAT NEXT?

DR. WALTER J. CHANNING, jun., in a communication to a recent number of the *New York Medical Journal* on the Vienna Medical School, introduces us to some curious facts in connexion with Prof. Neumann's clinique. Among Neumann's students were three American women:—

"During the last course Neumann asked us if we should object to having these women present. He said he himself didn't believe in their studying medicine, but still hardly wanted to be too one-sided, and would leave it to us. We, of course, like all Americans, assented. When one naked man after another is brought in, and always looked at with the same blank stare by these women, why, we men blush, if the women don't. If they would only confine themselves to their own sex, or at least not attend such clinics with men! It is a shocking want of modesty, and I haven't heard a person express anything but disgust at it. Even the medical local journals get in some flings at the 'American women' now and then. I think there are six of these young ladies here, one of whom is making a specialty of surgery."

Health-seeker, (Derby.)—The evil effects of carrying the sewage directly into the sea are being provisionally remedied at Brighton. With every rise of the tide the main pipe became a sealed tube; and the sewage gases, rendered doubly noxious by the action of the sea-water, mounted up to the highest houses on the slope, and affected them even more prejudicially than those situated on lower and presumably less salubrious levels. An intercepting pipe is now in course of construction to carry off the sewage into the sea at some distance from the town, but ultimately with the object (which indeed is the only proper one) of distributing it over the land.

J. R.—We refer our correspondent to the article on Cholera in the present number for the information he seeks.

Dr. John Williams's paper will be published next week.

THE RIGHT OF RESIGNATION IN THE NAVAL SERVICE.

To the Editor of THE LANCET.

SIR,—Can a surgeon holding an appointment in H.M. Navy resign his commission when he pleases, giving no reason for his doing so except his dislike for the service and his wish to try some other field of practice? Supposing a surgeon in the navy has already resigned his commission, and its acceptance has been refused by the Admiralty, can he (having entered into *no engagement* when first joining) compel the Lords Commissioners, either by taking an action against them at law, or by having the question asked in Parliament, to accede to his request? Yours truly,

July, 1873. JUSTITIA.

*** The question which our correspondent submits is, we understand, at present engaging the attention of the authorities at the Admiralty. When their decision is arrived at we will reply further.—ED. L.

Dr. Prosser James.—We must decline to make this journal the arena for the conflicts between Dr. Prosser James and the Editor of the *British Medical Journal*, especially as the matter of dispute is in connexion with a special Hospital for Diseases of the Throat.

Historicus.—Yes. Dr. John Fothergill was born in Yorkshire in 1712. He entered at St. Thomas's in 1736. His works, mostly medical, passed through several editions, and were translated into German. His tract on "Sore-throat" excited considerable attention.

Mr. A. Esper.—We do not know of any such place in London.

B.—The paper will be inserted.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Mr. T. Holmes, London; Dr. Meadows, London; Dr. Latham, Cambridge; Dr. Hughlings Jackson, London; Dr. Habershon, London; Mr. Teevan, London; Mr. Robins, Naples; Dr. Lister, Ashton; Mr. Wood, Paisley; Mr. J. Vincent, London; Mr. Clewer, Brighton; Mr. Ward, Weymouth; Mr. Moreton, Leicester; Mr. R. Wilks, Barton; Mr. J. Edwards, Worksop; Mr. Hopkins, London; Dr. Fothergill, London; Mr. Blackett, London; Mr. Tayler, Clontough; Dr. Seaborne, Wombwell; Mr. Macrae, Worthing; Dr. Wood, Gloucester; Mr. Kerr, Falcaragh; Mr. W. Farrage, Bristol; Mr. Lucas, Liverpool; Mr. Stow, London; Dr. More, Rothwell; Dr. Bodington, Sutton Coldfield; Mr. C. Anderton, Leigh; Dr. Dickson, Buxton; Mr. Bredin, Chart, Sutton; Mr. Lane, London; Mr. Redmond; Dr. Webster, Golcar; Mr. Courtenay, Mickleover; Mr. Ross, Waterfoot; Mr. Manley, East Rudham; Dr. Macnab, Bury St. Edmunds; Mr. Crayon, London; Dr. Theobald, Boston, U.S.; Dr. Payne, London; Dr. Stewart, Whitby; Mr. Cresswell, Halstead; Dr. Fuller, London; Mr. L. Williams, Hornsey; Mr. Raper, Birmingham; Mr. Wilson, Clay Cross; Mr. Thomas, West Bromwich; Mr. Royles, London; Mr. Norris, South Petherton; Mr. Tait, Birmingham; Mr. Sloman, Farnham; Dr. Prosser James, London; Dr. Walker, Hanley; Mr. Guilford Onslow, Alresford; Mr. Furnivall, Shere; Dr. Weaver, Longton; Dr. Lister, Littleborough; Dr. Lambrick, St. Agnes; Mr. Plumer; Dr. Young, Yarrow; Mr. Wicks, Maxwelton; Dr. Hillyard, London; Dr. Macnamara, Dublin; Mr. Ridley, London; Captain Mercier, London; Mr. Holford, Liverpool; Mr. Hunt, Wolverhampton; Mr. Wharton, Driffield; Mr. Johns, Winckley; Mr. Arthy, Eye; Mr. Kenneth, Worcester; Mr. Lakin, Leicester; Mr. Hulme, Stonham; Mr. Willmer, Galway; Mr. Hutchings, Southsea; Mr. Williams, Oxford; Dr. Willett, London; Mr. Freshfield, Harwich; Dr. Lowndes, Walker-on-Tyne; Dr. Stark, Barrow; Mr. Foster, Newport; Dr. Campbell, Carlisle; Dr. Mair, Morriston; Mr. Grace, Kingswood; Dr. Maclagan, Mexboro'; Mr. Chapman, Liskeard; Mr. Noel, London; Mr. Ruttledge, Berlin; Dr. Lynes, Coventry; Mr. Drury, Willenhall; Mr. Sparks, Loughborough; Mr. Davis, Southchurch; Mr. Browne, Lynton; Mr. Spence, Liverpool; Dr. Black, Glasgow; Mr. Wharton, Folkestone; Dr. Gordon, Salisbury; Mr. B. Lewis, Pembrey; Mr. Lamb, London; Mr. Russell, Longcroft; Dr. Sherlock, Powick; Mr. Harris, Croydon; Mr. Thorne, Ross; Mr. Hall, Uppingham; Mr. Crook, Lubbenham; Mr. Moore, Chester; Mr. Folkard, Leamington; Dr. Lister, Littleborough; Mr. Mason, Eltham; Mr. Allan, Fort William; Mr. J. Atkinson, Exeter; Mr. Colston, Woodbridge; Mr. Broom, Portmadoc; Mr. Ravenhall, Ovingdean; Mr. Parton, Colchester; Mr. Horne, Worcester; Beta; A. M. D., Bengal; Enquirer; W. A.; X. Y.; Bombay; Minimus Minor; S. F.; M.R.C.S. and L.M.; Delta; Lambda; At Sea; One Tricked; Medicus; X. Y. Z.; A Reader; Subscriber; L.M.; &c. &c.

Carlisle Patriot, Volunteer News, Western Daily Press, Yorkshire Gazette, Grant College Students' Journal, Western Daily Express, Manchester City News, Kerry Evening Post, North British Daily Mail, Madras Monthly Journal of Medical Science, Archives of Scientific and Practical Medicine, and *Manchester Examiner* have been received.

METEOROLOGICAL READINGS

(*Taken by Steward's Instruments*).

THE LANCET OFFICE, JULY 24TH, 1873.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
July 18	29·98	S.W.	61	63	107	73	60	....	Fine
" 19	30·21	W.	53	59	117	85	50	0·3	Fine
" 21	30·23	E.	65	72	121	89	65	...	Fine
" 22	30·10	S.E.	72	80	123	93	55	...	Fine
" 23	29·95	N.W.	72	77	120	89	69	...	Fine
" 24	30·11	W.	57	63	...	...	56	...	Fine

Medical Diary of the Week.

Monday, July 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, July 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, July 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Aug. 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Aug. 2.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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